

September 1944

Volume 1

No. 9

Page

HOW A STOVE MANUFACTURER HELPED RAISE THE
NORMANDIE.....by B. A. Nagelvoort 11

ENAMEL DECORATION—FROM ART TO INDUSTRY..
by Harold Tishler 14

WHAT TO EXPECT IN POSTWAR HOME LAUNDRY
EQUIPMENT.....by John M. Wicht 16

THE HOW AND WHY OF SIGN ADVERTISING—
PART VI.....by Ken M. Davee 20

KITCHEN PLANNING.....by Virginia Hart 26

FEATURES

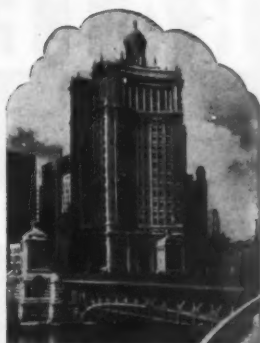
THE FINISH LINE.....9
FASHIONABLE STEEL COLLARS.....by The Wrangler 45
FROM THE EDITOR'S MAIL.....46

CERAMIC FINISH NEWS

WASHER AND IRONER MANUFACTURERS PREPARE TO "HIT THE BALL" 24
PRESSED METAL INSTITUTE ELECTS NEW OFFICERS.....29
INDUSTRY NEWS AND PERSONALS.....32
NEWS FROM WASHINGTON.....41
CHICAGO ENAMELERS CLUB TO MEET.....51
AFTER THE DEADLINE.....51

MISCELLANEOUS

PHOTOGRAPHIC "QUIZ SHOT".....40
NEW LITERATURE.....44
NEW EQUIPMENT.....50
ADVERTISERS' INDEX.....52



LONDON GUARANTY BUILDING
Michigan Avenue at Wacker Drive

The Home of
finish

Monthly Trade Publication
Published by

DANA CHASE PUBLICATIONS

Address
360 North Michigan Avenue
Chicago 1

Telephone.....Central 1229

The only independently published
trade publication devoted exclusively
to Porcelain Enameling and Ceramic
Finishing.

Editorial content includes Technical
Information, Plant and Processing
Articles, Educational Features, and
complete Industry News coverage,
both editorially and pictorially.

Free-controlled Circulation to those
intimately connected with the Ceramic
Finishing Industry.

To Others—

Subscription Price...\$3.00 per year
Foreign Subscription

Price.....\$5.00 per year

Copyright 1944
by Dana Chase Publications

Printed in U.S.A.

finish

ceramic finishes on metal

BOXES and CRATES

All Types of Wooden Packages



HINGE CORNER

NAILED CRATES

WIREBOUND

PLYWOOD

SHOP and TOTE BOXES



CHICAGO MILL AND LUMBER COMPANY

111 W. Washington Street

Chicago 2, Illinois

THE Finish Line



IT IS hoped the title for this page will find its most appropriate use in connection with the following subject.

According to highest authorities, we may be approaching "the finish line" in the present world conflict and there is, unquestionably, a feeling in the country that the end of the war is near at hand.

We have been asked to voice to our industry the plea of highest military authorities that "no man knows when the war will end and we must produce until the last shot is fired."

The message will be delivered in the words of Lt. Gen. Brehon B. Somervell, commanding general of the Army Service Forces, who points out that now is the time for the utmost in effort by both management and labor in the production of needed war materials to back up our fighting forces, and offers concrete evidence of actual shortages of essential war materials.

Says General Somervell: "On the whole the Army is in fine shape with respect to supplies. However, there is a shortage in about 320 critical items and there are about a dozen items which merit special attention from the standpoint of manpower. . . .

"Thousands of miles of pipe, 80,000 heavy trucks, tires, ammunition of various types, tanks, aircraft equipment, radar and radio equipment, construction equipment, tractors, artillery cranes, derricks, bulldozers and shovels are some of the war materials in which there are shortages."

One general had to call off 100 air missions because he "didn't have the right type of bombs," General Somervell reports.

A telegram from another general stated that 3,500 heavy trucks had to be abandoned "because he can't

keep them up any longer and they have to be replaced."

"We had to tell a general (in another theatre) that we couldn't furnish him with the four-ton dump trucks that he wanted, because we don't have them."

In support of his plea for production increases in derricks, cranes, and essential engineering supplies, the general said that demolition carried out by the Germans in the ports of Naples and Cherbourg were devastating.

In Naples the Germans sank a ship at every berth and toppled giant cranes on top of them. They destroyed bridges, signals, switches and whole sections of railroad beds. The Army engineers had to build platforms over sunken ships, repair railroads and rolling stock.

To compare the amount of shipping during the last war with that of this war—General Pershing got a total of 8,800,000 tons during all of World War I. We are shipping half that amount *every month* now.

In conclusion the general said, "This is the final round. There isn't any doubt about that, and if you can give these fighting forces what they need, all the heavy artillery they need, all the trucks they need to haul that ammunition; if you give MacArthur the tents he needs so he can take care of his men without stopping to build shelters, they'll push along fast enough and everybody is perfectly willing to do it."

The enameling industry showed its initiative and willingness to go "all out" for the war effort in the early days of the present conflict, and we are certain that same spirit will be evidenced by all those in the industry who can play a part in meeting present critical needs.

Number One critical is manpower, and this shortage can best be answered by every individual doing a man-size job.

Dana Chase



Inland Enameling Sheets pick up a smooth and even coat of enamel.

Use "Double" Grip Enameling Sheets

Inland Enameling Sheets, especially processed to increase the iron surface area, take a "double" grip on porcelain enamel. This increased area promotes controlled chemical reaction, which forms an enamel-iron "alloy" zone. The "alloy" welds the coat to the base metal. This Inland surface also provides innumerable microscopic talons which project into the enamel and iron alloy zone, giving a strong mechanical bond. This special feature of Inland Enameling Sheets assures "double" grip between base and enamel, shorter firing time, lower firing

temperature, and more durable enameled products.

Other advantages of Inland Enameling sheets are: they are made flat, and they stay flat during successive firings; because of special processing, they have exceptional resistance to sagging; correct temper is assured by at least two sets of tests made on each lift of sheets; and, Inland Enameling Sheets are true to gage, and dimensions.

Consult an Inland enameling specialist.

He is ready to call on you at any time.



Buy More War Bonds Today!

INLAND STEEL COMPANY

38 S. Dearborn St., Chicago 3, Ill.

Sales Offices: Cincinnati • Detroit • Kansas City • Milwaukee • New York • St. Louis • St. Paul

How a stove manufacturer

helped raise the Normandie

Plus a story on diversification in war product manufacturing

By *B. A. Nagelvoort* • PRESIDENT, RENOWN STOVE COMPANY, OWOSSO, MICHIGAN

Exclusive
feature
finish

If someone had told us when the war broke out that our company, which normally manufactures combination coal and gas-fired ranges and coal and wood ranges, would be making "salvage gear" to be used for raising sunken boats I would probably have thought that the speaker was a little "tetched in the head" as a result of reading the news of Pearl Harbor.

The truth of the matter is that we are, and have been, making, over a

period of months, salvage suction and discharge assemblies which are being used all over the world for just such a purpose.

Like most companies in the stove business, we found it necessary to convert to something more vitally needed for the execution of the war, and upon investigation we found that this type of equipment would be seriously needed as long as boats were being sunk, harbors blocked and invasions the order of the day.

Started from scratch

Our organization had no experience whatever in the building of such

equipment. None of the salvage gear had been built since the last war, so it meant that someone had to build the assemblies and build them fast in order to facilitate necessary emergency operations connected with the salvaging of sea-going ships and the clearing of blocked harbors.

We started cold from existing blue prints, and worked out our answer to the problem. After we were satisfied that we were on the right track and that the job could be done in our plant, bids were submitted to the Army and Navy.

To the layman the equipment itself

The piping is not the result of a Rube Goldberg cartoon, but forms essential parts for salvage equipment. Some of the war products manufactured by Renown Stove are shown in this display.





OFFICIAL U. S. NAVY PHOTOGRAPH

This photograph shows the "Normandie" (U.S.S. Lafayette) at one stage of the salvage operations. Everything above the promenade deck has been removed, all openings made watertight, and timber and concrete bulkheads installed to separate it into watertight compartments. Ninety-three sets of salvage gear were required to remove 100,000 tons of water from inside the ship. Total salvage cost—\$3,050,000.

looks more like a model from a Rube Goldberg cartoon than a piece of very necessary wartime equipment. Our company is now probably the largest producer of salvage gear in the country. Gear manufactured in our plant has now been used all over the world. It has been used at Casa Blanca, Oran, Naples, Egypt, and also has been furnished to the English and Russians under lend-lease.

The Normandie

One of the most interesting jobs in which our equipment participated was the raising of the Normandie — or, more correctly, the U.S.S. Lafayette — where ninety-three complete sets of the gear were employed to raise the huge ship.

Unquestionably everyone reading this brief article will have read the newspaper or magazine accounts of this greatest of all salvage jobs accomplished by Merritt-Chapman & Scott, and the Salvage Division of the U. S. Navy. A few highlights may offer an interesting review.

The Normandie was built by Compagnie General Transatlantique at LeHavre, France, and launched in 1932. It was completed in 1935 at a cost of \$56,000,000. It is 1029 feet in overall length, and has a displacement of 53,000 tons.

On its European run the vessel carried 2,000 passengers.

The liner was expropriated by the United States and renamed the Lafayette. As it was being refitted as a troop ship in February, 1942, it caught fire at a pier in New York and capsized.

Expert salvage engineers of the Navy and Merritt-Chapman & Scott Corporation decided that the best means of handling the salvage was to strip the ship, make it watertight and then, through pumping, depend on its own buoyancy for raising it.

Salvage gear played important part

Before righting the Normandie it was necessary to remove everything above the promenade deck, both above and below the water, and remove all furniture, partitions and loose material. It was then necessary to close 16 cargo ports and 356 air

ports on the under water side of the vessel, and remove about 10,000 cubic yards of mud. All promenade deck openings below the water line had to be made watertight, timber and concrete bulkheads installed to separate the ship into compartments above the existing bulkheads. The intermediate, or sea deck, also had to be made watertight.

Then followed the installation of the 93 sets of salvage gear to remove the 100,000 tons of water inside the ship. The ship was divided into thirteen separate pumping compartments by installing timber and concrete bulkheads up to the promenade deck. This was accomplished by placing timber bulkheads between the existing decks, and using concrete to make their ends watertight.

Water was first pumped into the ship so that the list of 79° was gradually decreased to about 49°. After it was apparent that the hull was more or less free of the mud bottom following this slow and tedious process, pumping was continued to completely raise the vessel and clear the water from the hull.

The \$3,050,000 total outlay for righting the ship was only a little over half of the original estimate covering the cost of this eighteen months' salvage operation.

It was originally intended that the Lafayette would be put into service as a troop carrier. It is understood that the Navy has not decided on the ultimate fate of this ship. Whatever the final fate of the "Normandie" may be, the engineering feat of its raising will remain an interesting chapter in the history of the "Super Liners."

Enamel plant conversion

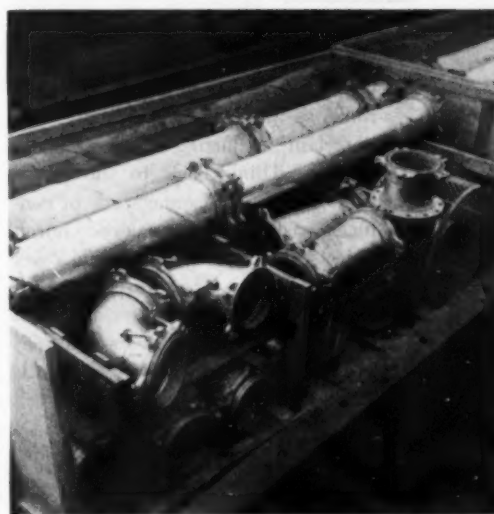
Another field of production activity, widely separated from the one just described, resulted in the conversion of our enameling plant to the production of magnesium sand castings.

Here we melt, mold, make cores, sand blast, band saw, lathe cut, and hand grind magnesium castings for aircraft. Castings must be heat treated, di-chromate pickled and aged.

to Page 50 →

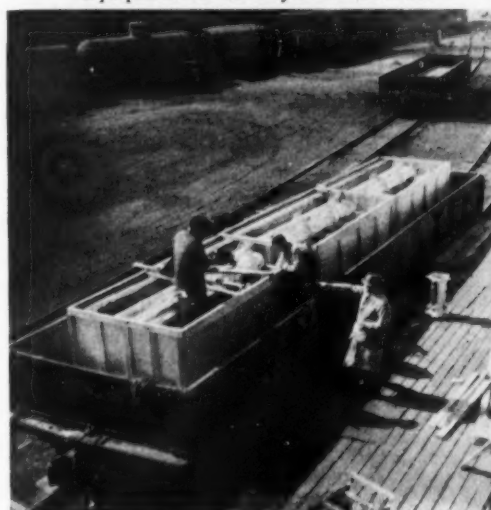


Sections of pipe for salvage assemblies.



Equipment crated for export shipment.

Equipment on its way to raise boats.



Enamel decoration —

from art to industry

An artist's viewpoint on how enameled art could be used in postwar homes

By Harold Tishler • DECORATIVE VITREOUS ENAMELING, NEW YORK CITY



The enamel industry of today, and as it's now roughed out for tomorrow, is tapping only two-thirds of its potential market. In their rush to exploit enamel's hard, lasting, finish, manufacturers have forgotten its high rank as an artist's medium. For porcelain enameling was originally an art. Think back to the lovely Limoges and Cloisonne work of centuries past, the richly colored church objects, the exquisite plates and vases that take their place with pottery and bronzes as art objects for all time. It is only in recent years that enamel has been used mainly as a utility finish.

It is common knowledge that post-war competition in finishes will be severe. Plywood, glass, plastics, aluminum, wood and steel are all jockeying for a lead in the field. But new decorating mediums are less common and, at the same time, the public demand for "art" is leaping ahead.

Therefore, a shrewd business man will seek to temper his post-war utility product with art. In the field of finish, this would mean bringing the enamel artist into the factory, to revive an old art and initiate a new industry — decorative enameling.

Present enameled art limited

This is quite within the realm of possibility. The art of enamel design, not yet commercialized, (for the simple borders and checked patterns on occasional enamel table tops is not art), is still practiced in its original form by eager craftsmen throughout the world. But, for want of giant

kilns they must waste their talents on small pieces like jewelry and ash trays. (Incidentally, their limited production is quickly snapped up by an eager public — sure testimony to its popular appeal.)

Working for industry would give the artist new facilities and new scope, which he would certainly welcome, while he in turn would offer his talent and imagination for the industrialist to convert into salable products. With the public receptive, the artist willing, and the post-war homes market crying out for new art media, the manufacturer has an ideal prospect in view.

Editor's Note:

Most of us whose business contacts are, for the most part, with manufacturers and commercial interests automatically look to the "practical" and "production" aspects of any suggestion of something "new." It may be refreshing — most certainly a contrast — to read the thoughts and expressed viewpoint of one who looks to the future with eyes of the artist.

We would not expect the enameler, or the appliance or home equipment manufacturer, to agree with the artist's suggestions, but there may be a "meeting point" for the minds somewhere between contrasting views. We leave this to the readers' decision.

To be sure, the idea isn't entirely new — if you consider the simple border designs on bathroom walls or the geometric figures on living room mantelpieces — but these are as different from the art of enameling as Mairzy Doats is from Brahms.

To be specific, the designs will be

neither small nor simple. Taking the home as our base of operations, industry and business will certainly find a place for the art once it is established. There are three main niches where large-scale enamel art can fit right in.

For the kitchen and bath

First — starting with surfaces traditionally ceramic, even today — designs could be worked out on kitchen and bathroom walls. Instead of a single border-row of colored tiles, a whole scenic design could run from floor to ceiling on one side of the bathroom, with perhaps a mirror repeating the view on the opposing side. An aquatic landscape in cool greens and blues, a lively abstract, vari-colored floral motifs, or even a socially significant "mural" might catch the customer's fancy. In the kitchen, simpler designs of gay fruit and vegetable groups might be repeated at intervals on the enameled wall, or again, a mural-type panel — say, a marketing scene or a landscape of peasants — could be tried out. The fact that all these can be wiped clean with a damp cloth will be a major selling point for any housewife.

For "built-in" decorative art

But enamel art is too lovely to be confined to the kitchen and bath. A second, more elaborate type of decoration, destined for rooms and walls which ordinarily are not enameled, would be the large-scale plaque. Just as a picture is hung, so this could be installed into a niche on a plaster wall — except that the plaque would be permanent. Manufacturers need not fear that consumers will shy from such plaques as "arty," for



This 18" diameter plaque was designed for use in a bathroom. The plaque first received two coats of white enamel over the steel base. The design was then transferred to the white background with the aid of carbon paper. The fish were then masked, and a transparent green enamel sifted over the background unevenly to effect the appearance of water. The shapes of the fish were then cut out of thin silver foil, gummed into place and fired at low temperature. Final decorating was then done in rich transparent blues, turquoise, yellows and golds. Other colors used included yellows, golds and a rich transparent red. When fired over the silver foil these enamels take on a rich iridescent appearance. The final effect was accomplished through eight individual firings.

thanks to the current popularization of paintings by department stores and artist groups, public taste has improved tremendously within the last decade, and every year sees thousands of newly art-conscious Americans.

Such plaques would be practical only where they are provided for in the architect's blue prints, as each should have its own niche to give the effect of "belonging." Therefore, they would best be talked up to post-war home builders rather than to home owners who intend to remodel.

Here the artist would have ample chance to display his style and skill. The home owner could either select from stock plaques or order his own design, much as he commissions a water-color, the manufacturer being the intermediary in all transactions. Reproductions of famous paintings might form one group, original florals, still lifes, landscapes, or even portraits and figures might form another, while a third might consist of modern, progressive treatments of any desired subject. In short, these plaques would be as sound art as any

framed painting — yet they would have the additional advantage of being a permanent and integral part of a room. The colors of the enamel might even serve to key the color harmony of the room furnishings.

Fireplace mantels, being a natural focus of attention, would be an excellent foil for colorful plaques, and so would dining room doors, foyers and narrow walls.

Furniture ensembles

A third field, that would directly join beauty and utility, is the decoration of furniture and possibly appliances. Three meals a day would be less of a chore if they were cooked on a cheerful yellow kitchen range, decorated with attractive red floral patterns. Ask any housewife! Bright enamel pots in matching motifs, but beautifully worked out — not with just the simple rough lines of today's pot designs — and perhaps a harmonizing touch of color on the refrigerator door, would make the kitchen as eye-appealing as any other room in the house.

Or, consider the nursery. Fairy tale scenes centered on the enameled head-boards of a crib could be repeated or enlarged upon in wall plaques, thus giving the room a practical, durable, yet charming touch of art. Bureau drawers might have similar inserts on their front surface — perhaps changeable, so that they might reflect the child's growing tastes.

Obviously, this is just a glimpse of the possibilities that lie ahead for an alert manufacturer. The artist will have his own ideas on the subject and so will the public, once the idea catches on.

Remember, the field for decorating the post-war home is wide open! Consumers, weary of drab war-time living, will look for color and spirit in their homes. Restricted for so long to conventional decoration, they will welcome a new medium. Tired of shoddy "victory" merchandise, they will be eager for lasting goods — in art as well as practical living. The craftsmen and the public are ready. Where do the manufacturers stand?

What to expect in postwar home laundry equipment

How washer and ironer manufacturers are planning for the future

By *John M. Wicht*. DIRECTOR, HOME LAUNDRY EQUIPMENT DIVISION
GENERAL ELECTRIC COMPANY, BRIDGEPORT, CONNECTICUT

THE majority of retailers of household appliances have magnificently weathered a period of stress, and in this they have the full support of the producers of these products.

Now that the lights are coming on all over the world, it is time to make plans for post-war. We, in the Home Laundry Equipment Industry have been doing that, just as the retail trade are doing it. Interest among those who sell the products of our appliance manufacturers to the consuming public in the merchandising opportunities that lie ahead is at a new high.

In a survey conducted by the National Retail Furniture Association it was revealed that major appliances topped all other departments in dealers' plans for setting up new display departments and modernizing stores. Washers, ironers and dryers are important members of this group of major appliances.

Manufacturers and retailers have one particular problem in common. It is: "How many can I sell?" The answer is: "As many as you plan to organize to sell." And the number that are sold will be the principal factor determining how many jobs will be made available.

Industry studies the "How" of reconversion

Our industry, I believe, has planned wisely. In 1943 the American Washer and Ironer Manufacturers' Association organized a committee for the purpose of studying and originating plans for the reconversion, when and as reconversion should be possible. That committee drew up plans, and

worked them out in detail with the War Production Board in Washington. These plans, which were welcomed in a cooperative spirit by the WPB were, so far as I know, the first conceived for reconversion of any industry.

The "How" of reconversion has been largely agreed upon, subject to the approval of WPB. The "When" is still up to Hitler and Hirohito. This year may see the start of home laundry appliance manufacturing.

Don't look for washer tubs of vitrified seaweed

It is not for me to give you advance information on the character of post-war laundry products. But do not look for dream world products in plastics, jet propulsion ironers or washing machine tubs made of vitrified seaweed. On first thought this may sound disappointing, but actually a revival of the latest 1942 washers, ironers and other appliances will be a big step toward making the rosy post-war promises materialize. Electric appliance manufacturers when asked: "What are the first things to be made when peace comes?" answer: "The same things that were made in 1942." However, it won't take too long to improve appliances over anything we have known in the past.

A number of automatic washers are being developed. I know of at least one automatic washer that will offer entirely new and outstanding features.

New materials, new manufacturing skills, new trends, all will combine to rejuvenate this industry. The retailer, and particularly the consumer, will benefit greatly.

Individual companies have made long strides in development during the war years. And our industry's Association has not been idle. A Standards and Labeling Committee has had in charge the study of standardization, of nomenclature, and efficiency. Post-war merchandising of home laundry equipment, so far as comparative efficiency of washers is concerned will be on a high and scientific plane. This will benefit not only the customer, but will be of inestimable value to the retailer in clarifying standards.

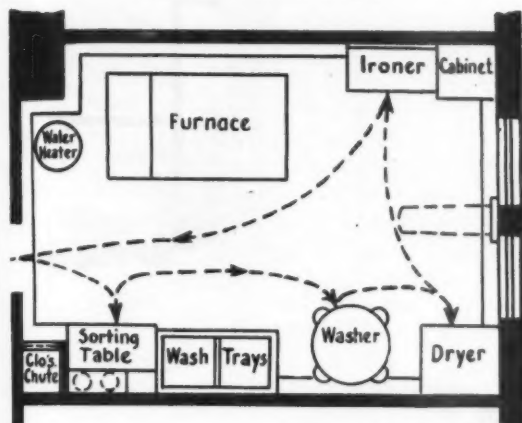
We have also devoted the time and talents of outstanding members of our Association to a new study of the place of the laundry in the home. We will be able to tell any dealer what his customer wants — where she wants it — and why. To this study, architects, technical experts, and home economists have all made contributions. The postwar home laundry unit, at a reasonable date following conversion, I can assure

John M. Wicht

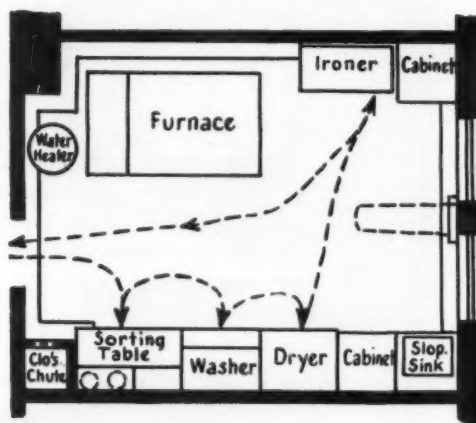


In addition to being director of G.E.'s Home Laundry Equipment Division, Mr. Wicht is president of the American Washer and Ironer Manufacturers' Association. In this connection he takes a leading part in the industry's cooperative activity, and was a prime mover for the industry's postwar planning program.

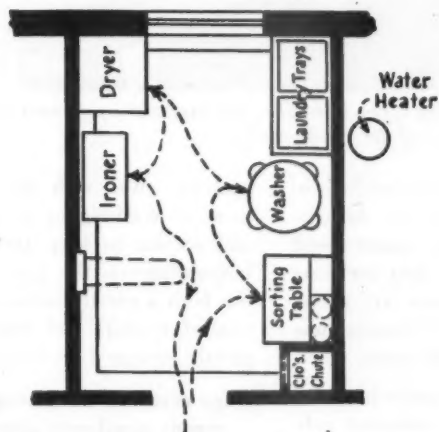
LAUNDRY IN UTILITY ROOM
(Conventional)



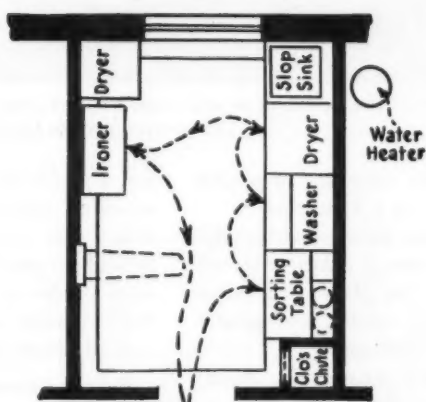
LAUNDRY IN UTILITY ROOM
(Automatic)



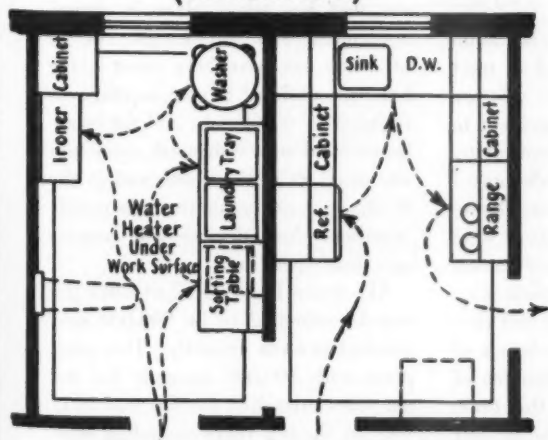
BASEMENT LAUNDRY
(conventional)



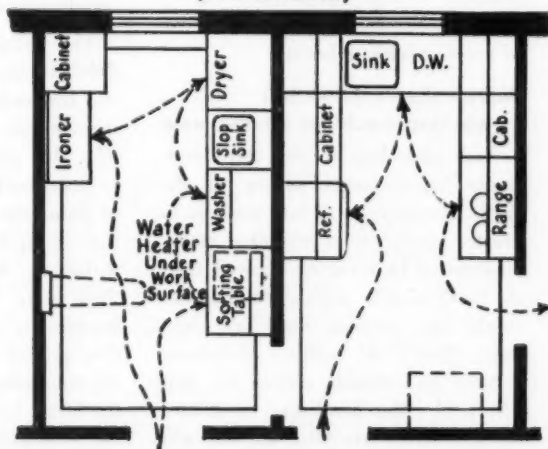
BASEMENT LAUNDRY
(Automatic)



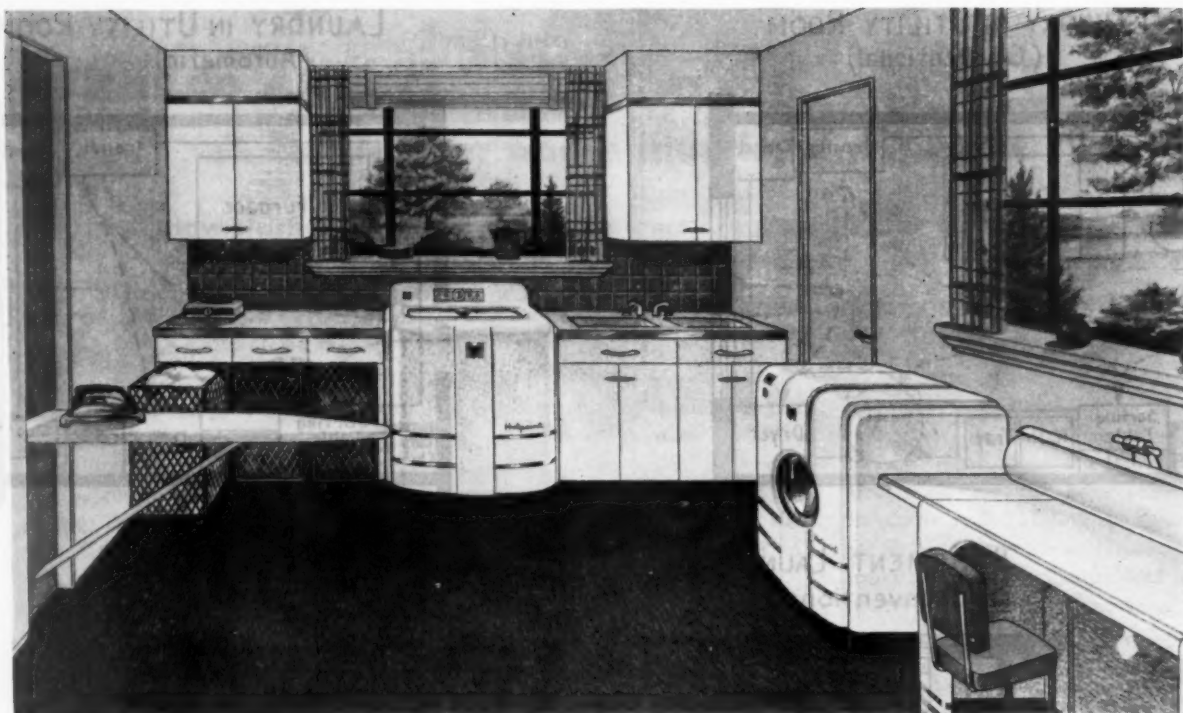
LAUNDRY AND KITCHEN-1st FLOOR
(Conventional)



LAUNDRY AND KITCHEN-1st FLOOR
(Automatic)



These sketches show a few of the many possibilities for logical placement of laundering equipment of both the conventional and automatic types. In addition to the sketches reproduced, the industry has designed logical layouts for separate laundries on the first floor and for kitchens in which the laundry equipment can be incorporated.



Here is an artist's conception of a modern first-floor laundry room with all of the essential equipment arranged for convenience in the handling of the family wash.

you, will be as refreshing as a mint julep; as new as a helicopter.

In a word, the home laundry equipment manufacturing industry has not been asleep. Our plans spell future profits for the retailer, and greater satisfaction to the user.

The market is tremendous. Appliances wear out. The National Association of Manufacturers estimated the deferred buying of consumer goods at the end of 1943 at 22½ billions of dollars. Fortune magazine's survey showed about 28 billions, 300 millions of prospective purchasing.

Survey shows 4,261,560

washing machines needed now

And according to the third consumer requirements survey of the WPB, consumers will buy washers in greater number than any other major appliance. This survey showed that, if they could, 4,261,560 families would buy washing machines right now! That's 341 millions of dollars.

Such an estimate scares us. But Electrical Merchandising estimates the first five years after the war will show a 91 per cent washer sales increase over the five years prior to our closing down. Even that frightens

me. I prefer the perhaps timidly conservative estimates of our Association — that 2,500,000 washers will be sold per year for the first five years after production releases are given. This compares with our best-pre-war year of about 2,000,000 units.

But some intangibles must be added to these figures — the enhanced public acceptance we have gained, for instance, and the novelty and attractiveness that will be lent by new materials, new designs and new products.

The failure of commercial laundries during the war period to meet the tremendous obligations cast on them by the emergency is evident to all. This gigantic failure immediately increased the known advantages of doing the laundry at home. Those possessing washers and ironers were fortunate. Many of those not having them were forced to do their own laundry by primitive means and thus they gained a better appreciation of the time and labor-saving benefits of the home laundry. During this time, our Association and many of our manufacturers employed their publicity and advertising to instruct owners of equipment on how to keep it

running. We, with the encouragement of Washington, provided parts and service to keep these essential instruments on the job. The result has been a greatly enhanced revaluation of washers and ironers, and a greatly increased acceptance of them.

Huge reservoir of buying capital means appliance sales and jobs

We believe, and at least hope, that prosperity will continue. It can hardly fail to when you consider the wear-out that has taken place in owned appliances, and war wages, not all of which can have been spent — the huge reservoir of buying capital represented by war bonds, and the establishment of new industrial areas and new markets in the South and in the West. Jobs are made through people spending. New devices will encourage their spending.

The home building effort after the war is estimated to be 900,000 new residential units annually. This compares with 300,000 annually for the ten years preceding the war and 700,000 for the ten years preceding that. Our information indicates that one-third of such new homeowners buy new washers.

Again, how many can we sell?

This is another way of asking what does all this mean to you? (The manufacturers, and to the retailers.) I'll tell you. It depends on planning and organization to sell. It is a mutual undertaking, and I believe by knowing our undertakings there will be a better opportunity to plan to take advantage of them. Therefore, manufacturers and retailers should plan together and now. It must be our responsibility to stimulate acceptance by our advertising and publicity; the retailers, to stimulate buying by advertising, store procedure, merchandising and display. In all these, our individual manufacturers will be more than willing to do an effective job.

Sales training a problem

for manufacturers and retailers

It is a mutual problem of manufacturers and retailers to find and to train salesmen. There are, I believe, 20,000 recognized furniture retail outlets alone. With an average of four salesmen each, we face the responsibility of finding and educating

80,000 salesmen to spearhead the selling effort in this one field. Not a small job—and a large one if we consider the other important outlets for our products. Further, these men must be trained in specialty selling. Not only because our new home laundry products will require that type of selling—and will justify it in terms of return to the salesmen—but also because I believe the era we are planning for will be the most highly competitive in the history of the world.

It will be competition not merely within industries, but competition of one industry against another for the consumer's dollar. This is a healthy situation, but we must expect to sell not only against the automobile, the airplane, but every other type of expenditure our people have been prevented from making for so long.

Our industry has done a great deal of research on the proper location of the laundry in the home. We have developed plans indicating numerous possible combinations of the laundry

room with other household functions and activities. These should be of decided usefulness to architects and home planners.

Complete laundry room justified

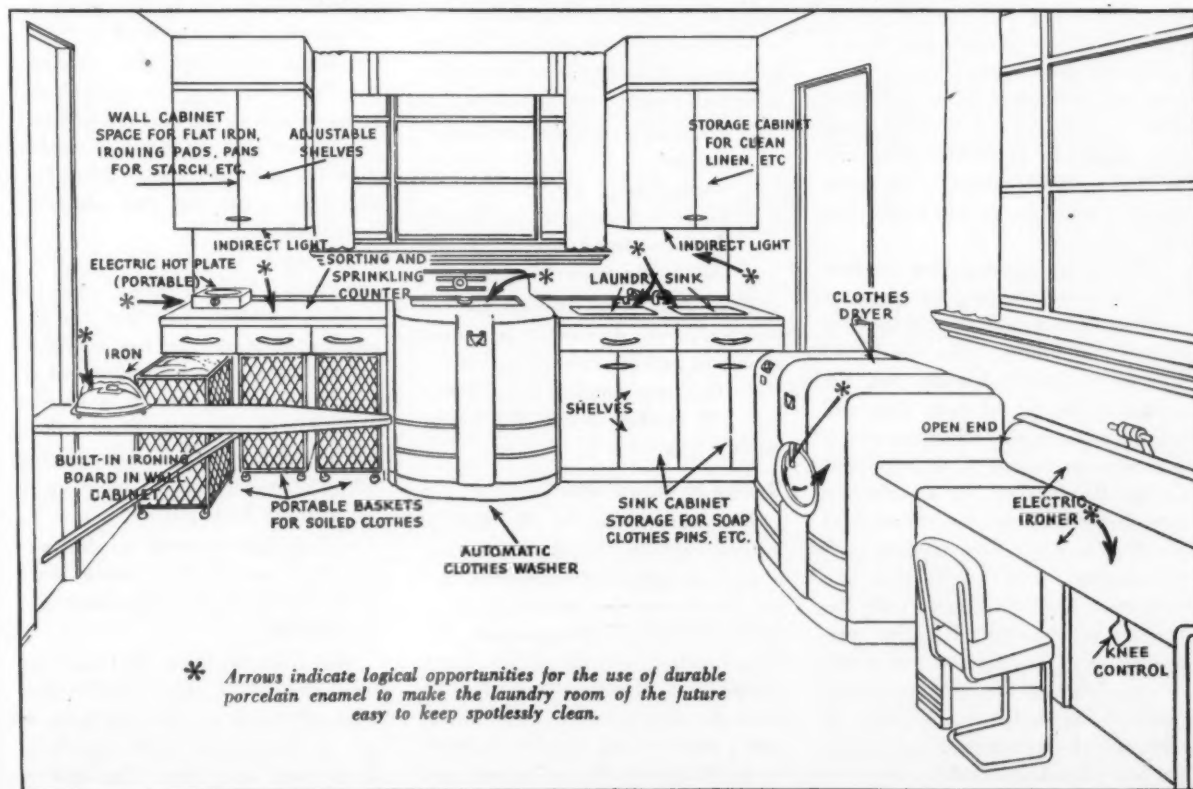
I believe we can show that the savings resulting from laundering at home not only pay for the equipment itself, but are amply sufficient to justify the addition of a first-floor room to house this equipment. This room can become a new living center for the housewife, and when attractively styled is as appealing as the modern kitchen or bathroom.

For thirteen years, the industry has talked about model laundries. After the war we will put much greater effort into this idea, and we will have the full cooperation of the utilities, both electric and gas, as well as the women's magazines.

Model laundry rooms in stores will sell not only washers, ironers and dryers, but hand irons, ironing boards, hampers, even soap. If the displays are made attractive to women

to Page 50 →

This explanatory sketch details the equipment suggested for this "last word" in first floor laundry rooms. Such suggestions as these should be of interest to future home planners.



The how and why of sign advertising

By Ken M. Davee • DAVEE, KOEHNLEIN AND KEATING, CHICAGO, ILLINOIS

PART VI • Laying out an effective sign



On the radio they say: "There will be a brief pause for station identification." But when it comes to service stations, or outlets for many another product, the time available for the passer-by to identify the station is too short to be called a pause.

At pre-war, or even at wartime speeds, the identification sign must do a split-second selling job. It must convey its message in a flash. If it does, the advertiser gets more business; if it doesn't, business is lost.

Other outlet identification, even signs designed for pedestrian traffic on a busy downtown street, must also do a fast selling job. Studies on the effect of window display show that a successful display must give a complete selling message in no more than three seconds. That is the time given to a display by those who pause momentarily; the "lookers" must sometimes be sold even more rapidly than that.

Thus it is apparent that whether your signs are designed for motor or foot traffic, they must be designed for split-second selling. The word "designed" is used advisedly, for the design or layout of your sign will largely determine its effectiveness.

Design or layout is so important in the development of an effective sign that it deserves the attention of qualified layout artists, familiar with the medium with which they are working. This experience with the medium is important. It is only reasonable that a sign artist with years of experience in the design of signs, one who has studied the legibility of various styles of lettering and combinations of color, should produce a

better sign than an artist without that experience. Such artists are available and ready to serve you in the art departments of the major sign producing companies.

This part will give you an understanding of the principles of layout together with both the possibilities and limitations of sign design. It will help the sign buyer understand what makes for a well laid out, effective sign and in this way will equip him to work more intelligently with the layout artists. It will help a layout artist, unfamiliar with sign design, by giving him an understanding of the characteristics of the medium with which he is working. It will be suggestive for everyone in that it will point to what others have done to make their signs most effective.

The primary objectives of all layout—including signs familiar to every advertising man—are as follows:

1. To attract attention and arouse interest.
2. To be read.
3. To be remembered—to identify the advertiser's product or service in the reader's mind.

These may seem to overlap, but separate layout devices are employed to obtain each of these three results. How they are employed so that a sign will produce results will be described now.

Design to attract attention

When the novice in the field of advertising faces the job of designing a sign or other advertisement that will attract attention, he usually thinks of the bizarre and the unusual. The layout artist, on the other hand, knows that attention, attracted by methods unjustified by the advertiser's product and message, is likely to be held only for a limited time

and that eventually it will react to the advertiser's disadvantage. The layout artist thinks of attracting attention by the skilled use of the physical and psychological tools he has at his command.

The ways in which an experienced layout man will get attention for his signs are as follows:

1. Sheer size

The layout man knows that the larger his sign is, the greater the likelihood that it will catch the attention of prospective customers. He will make the sign as large as possible, being guided, of course, by the limitations placed on him. The size may be limited by the place where the sign is to be mounted, as on storefronts. It may be limited by the comparative importance of the product being advertised. For instance, the "courtesy card accepted here" signs on service stations are of lesser importance and are therefore smaller than the principal station identification sign or the sign that advertises motor oil.

Size again may be limited by the advertiser's budget, which calls for a given quantity of signs for the amount of money he has available. In such a case, the advertiser will do well to consider issuing a smaller quantity of large signs, placing them on his best outlets, and employing future appropriations to build up to the quantity he requires.

It is false economy to design a sign too small to reach the maximum number of prospective customers.

The cost of signs that are too small to perform their identification work effectively was brought home to the oil companies as the speeds of motor cars increased. The cost of

business lost because stations could not be identified in time by the more rapidly traveling motorist far outweighed the cost of larger signs.

Another size limitation to consider results from the building codes and regulations of various city and other local governments. The sign supplier is familiar with the general practice in regard to these.

2. Contrast

Contrast is probably the most common and the most easily used attention-getting device. Harold Holland Day, sign artist, explained the effect of contrast in an article in *Signs of the Times* in this way:

"Contrast employed with good judgment attracts attention and arouses interest and curiosity of all kinds of people. Contrast tends to lift a person out of his own immediate self-interest by drawing his attention to something in its own unexpected association toward something else with which he is also familiar. It causes discovery on the part

of the observer, either consciously or subconsciously."

Contrast between the various units of a sign or between your sign and a competitive sign may be obtained in a variety of ways including:

Color.

Size.

Style or spacing of letters.

Shape of sign itself or of two (seldom more) elements of the sign.

Amount of space used for lettering or design compared with entire face of sign.

Too many contrasts may defeat their purpose and result in a confusion of impressions—distraction rather than attraction. While striving for attention, therefore, you must keep the power of simplicity in mind. You may get contrast, and consequently attention, with simplicity as readily as with any other design treatment. As an experienced sign man said, "Although every inch of a sign is worth many dollars in advertising value, it doesn't follow that it

should be filled to overflowing with copy and art. Blank space, provided it gives effective sign display to copy, can often mean more in effectiveness than many lines of lettering."

3. Motion as a means of attracting attention

Motion is one of the most effective ways of gaining attention. Its attention value is based on the impulse to turn quickly to see moving objects. This impulse arises from an instinct inherited from the days of battles with predatory animals. The effect of motion, obtained by moving parts of the sign and by flashing or dimming illumination, adds substantially to the attention value. The additional cost of movement is justified in two situations:

a. Where the competition for attention is such that the additional attention value is required.

b. Where there is sufficient traffic to justify the additional investment.

The cost of operation of an elec-

The sign "must convey its message in a flash. If it does, the advertiser gets more business . . ."



tric sign employing flashing to furnish motion, contrary to what the uninformed might expect, is actually less than when no flashing is used. A flashing sign is lighted only during a part of the time it is in operation and during the time that it is not lighted, of course, no energy is being consumed.

Motion in sign advertising is a subject deserving special study in terms of the specific job to be done. Specialists in the electrical advertising field, and in the field of lighting, will be glad to consult with you regarding any applications you may have. It is a field that has developed so rapidly that any but the most basic suggestions which might be made here are likely to be outmoded before you are ready to apply them.

4. Dominant or unusual brightness as a means of getting attention

Man, naturally, is attracted to the brightest objects. Instinctively, he has a powerful compulsion to look toward any object that is intensely bright. Brightness is a potent factor in creating selling power. Everyone knows that in order to take a picture with a camera, there must be a certain amount of light, and the more light present the shorter the time of exposure necessary.

The same conditions apply to the eye. Whenever it sweeps past a sign, a certain amount of time is necessary for the eye to secure an impression sufficiently strong so that it can transmit an intelligent feeling or concept to the brain. As the sign increases in brightness and visibility, the time necessary for it to make an impression is reduced. The brighter the properly-designed sign, the clearer and the deeper the picture that will be produced and the greater the memory value thus created.

Dominant or unusual brightness in a sign is, of course, obtained from reflection of sunlight or artificial light sources, or from exposed or reflected illumination which is an integral part of the sign itself. In considering the brightness of the sign, the sign buyer and the layout man must give attention to the material itself. In this connection it is well to remember that

porcelain enamel has an extremely high reflectance value—one of the highest obtainable. This material is preferred where the maximum reflectance of light is concerned, not only because of its high initial efficiency, which may be approached by other materials, but also because it maintains that efficiency for many years with an occasional and inex-

About Ken Davee and Davee, Koehnlein and Keating

Finish has had numerous inquiries for information on the author of this series of sign articles and his company connection.

As explained earlier in the series, the research on which these articles are based was conducted before the war. As a matter of fact, it would have little significance otherwise.

Since Pearl Harbor the members of the firm of Davee, Koehnlein and Keating have gone to war. The author, Ken Davee, is now a Lieutenant in the Navy. He attended Northwestern University for both undergraduate and graduate work in economics and research technique. He has had a number of years' experience in service organizations on marketing problems which included work for a number of the major oil companies, some of the largest organizations in the appliance field, and the large mail order houses.

In 1937 Ken Davee, Wilson Koehnlein and Paul Keating formed the DK&K organization, specializing in research work for this class of clients.

When war was declared they moved en masse into the services—Davee to the Navy, Koehnlein to the tank destroyers and Keating to the Signal Corps attached to the Air Corps.

Finish wishes them the very best of luck and will hope to see them back at the old stand on Michigan Blvd. after V-Day.

pensive cleaning. That is why porcelain enamel is used so extensively as a finish for commercial reflectors of all kinds.

All these methods of building attention value in a sign—size, contrast, motion and brightness—need not be employed in any one sign. Size and brightness, for instance, are mutually complementary in their effect on visibility. If for some reason the sign can not be made as large as it should be to serve its purpose, the attention value can be increased by means of a more effective contrast

between the color of the message and the background. If, on the other hand, the color combination is already established by the trade-mark or by previous identification signs, attention value can be increased by increasing the size.

The competent layout artist, familiar with all the means of attracting attention, will study the requirements of your sign and employ each device in the way that will give you best results.

Design to get the sign read

After the attention is attracted to a sign, it still must be read, or at least identified, if it is to perform its function. Mere attention value isn't enough. In order to be read, a sign must be legible. The distance at which it must be legible is determined by its purpose. If it is a sign that will be used in quantity, a survey will indicate where the typical or "average" sign will be hung.

The factors that determine legibility are these:

1. Size of lettering.
2. Style of lettering.
3. Color contrast.

The practical test for the size of lettering necessary for any particular purpose is to make up samples on cardboard or other inexpensive material, hang them in a typical position, and see whether or not they can be seen at the maximum viewing distance; that is, the maximum distance at which you want a prospective reader to be able to see them.

Practical tests of this nature are employed by sign users on many types of signs. In one case, the visibility of a particular letter size on a large spectacular was tested by hanging the letter "S"—one of the most difficult letters of the alphabet to recognize at a distance—in the regular position it would occupy on the proposed spectacular. Then its visibility was checked at increasing distances and under varying lighting conditions.

Recommendations as to letter size, based on experience, are available from your sign supplier. The makers of illuminated signs, both those with neon tubing and those using incan-

descent lamps, have similar information on letters formed of their materials. General Electric also has a Design Sheet for Exposed Lamp signs by which the specifications for such a sign can be reliably established without recourse to empirical testing such as is suggested here. The exact size of letter, wattage of lamp, spacing of lamp necessary for the most effective sign can all be determined by means of the formulas their Engineers have developed.

Importance of style of lettering

The style and spacing of lettering also influence the legibility. Tests show that a word composed of capital letters is more difficult to recognize, and consequently less legible, than one of lower-case letters. The pattern a printed word makes with its ascenders and descenders is fixed in the mind from early childhood and because each word of small letters has a different pattern, it is more readily distinguishable from another word than one word of capitals is from another. To illustrate this point, the word "fired" and "mired" are more easily distinguishable in small letters than in capitals like this: FIRED and MIRE. The top and bottom lines of the two words are uniform when the capitals are used. They form a different and identifiable pattern when upper and lower case are used.

Similarly, a printed letter is usually more legible than a script letter. That's because most people read a great deal more printing than they do script. On the other hand, script has greater contrast for just this reason. It is more unusual. Therefore, what it loses in legibility may be gained by a larger size and greater contrast.

Script also permits the creation of an individual pattern. "Florsheim" shoes and "Sears," the partial identification of Sears, Roebuck and Company, are two well-known sign users who have made use of a script with a distinctive pattern. The signs of the Jos. Schlitz Brewing Company are also good examples of script that provides quick identification. However, script should be used sparingly and in its simplest form.

Increasing legibility by means of raised letters and colored returns

Raising the letters on a sign, or using cut-out letters increases the legibility by increasing contrast. Users of raised letters, and particularly users of raised script, have found that they can increase the legibility of their signs when viewed from an angle by using a color on the return of the letter that contrasts with the color used on the face.

Color contrast as a factor in legibility

Contrast is a most important factor in securing maximum legibility — both contrast in the use of blank space surrounding the lettering to set it off, and contrast between the color of the lettering and the background.

According to tests conducted by Matthew Luckiesh, color authority and author of the basic text on this subject, *Color and Colors*, the best combinations of color for legibility are as follows, beginning with the most legible and leading to the least legible:

1. Black on Yellow
2. Green on White
3. Red on White
4. Blue on White
5. White on Blue
6. Black on White
7. Yellow on Black
8. White on Red
9. White on Green
10. White on Black
11. Red on Yellow
12. Green on Red
13. Red on Green
14. Blue on Red

If this table were followed exactly by all sign users, there would be a predominance of signs with the first three or four combinations. The truth of the matter is that the distinction which a sign gains by employing a less commonly used combination may often offset the legibility lost by that use. Also, various shades of colors are used rather than the completely saturated colors themselves. Thus a combination of two shades or one shade and one saturated color may have greater legibility than two saturated colors.

The layout artist, manipulating

size and other devices, can make effective use of a great variety of colors. The fact that almost all the above combinations in a variety of shades, and some not listed here, can be seen in a drive through any area where the traffic warrants much outdoor display, is proof enough that layout artists know how to cope with the apparent limitations imposed by color combinations favored by legibility. The depth of tone of the darker of the two colors is particularly important. The Quaker State combination of white on green is a good example. This combination, according to the Luckiesh tests, ranks ninth, yet it appears to be an effective sign. If the green used were considerably lighter — say an apple green — then the contrast afforded would be reduced and much of the effectiveness might be lost.

Use of an outlining color

If for some reason two colors, both of which are comparatively dark, must be used, a third and sharply contrasting color may be introduced as an outline for the letters. Such a color might serve as a shadow to make the copy stand out in relief. Competent layout artists who understand color, however, use outlined letters only when necessary to add visibility and legibility to the copy. Many artists hold the opinion that too much outlining has been used without a justifiable reason and the result, instead of improving the legibility, has actually detracted from it.

Selecting permanent color

In connection with color, particularly as it applies to legibility, the layout artist must again give attention to materials. Most color combinations are available in a variety of materials, of course. The sign user is not only interested in the legibility of his signs while they are new, but also after they are in use and exposed to the elements for month after month, year after year.

Blazing sun, rain, snow, sleet, freezing and thawing, all attack the surface of your signs. To stand up under these deteriorating conditions,

to Page 47 →

Washer and ironer manufacturers prepare to "hit the ball"

IF PREPAREDNESS is what it will take to negotiate a rapid reconversion to peacetime manufacture and provide jobs for the thousands of men now working in the industry's plants on war products, then the household washer and ironer manufacturing group should be among the first to get away to a good start when the Government says "Go!"

Conversion problems and other phases of industry activity were discussed by the membership of the American Washer and Ironer Manufacturers' Association at a meeting held Wednesday, August 9, at the Edgewater Beach Hotel, Chicago.

Various manufacturers reported that they would be able to begin making washers within 90 days after receiving the "Go!" signal from Washington, and obtaining necessary materials and parts from suppliers to the industry.

John M. Wicht, director of Home Laundering Equipment Division, General Electric Company, and president of the Association, was presiding officer, assisted by A. H. Noelke, executive secretary.

Committee reports

Included in the program were reports by the chairmen of the various industry activity committees. Among those reporting were Roy A. Bradt, vice president of The Maytag Company, chairman of the Post-War Planning Committee; I. N. Merritt, vice president and general manager of the Conlon Corporation, heading the Publicity and Advertising Committee; Homer Reeve, general sales manager, Easy Washing Machine Corp., reporting on export trade for the industry's products; and Eduard Geldhof, vice president, 1900 Corporation, reporting on the Technical Committee's work, which includes washability and wearability tests. William Shaw, public relations advisor to the Association, reported on industry publicity.

It is significant that Mr. Geldhof reported 4400 man hours in committee work already expended on techni-

cal committee problems. Four laboratories are running "full blast" on tests, with two more to join the activity soon.

Government contacts

Judson S. Sayre, president, Bendix Home Appliances, Inc., and chairman of WPB Industry Advisory Committee, reported on Washington contacts with WPB, and stressed the effect that a 25% cutback in the use of fractional horsepower motors for war purposes would have on the motor suppliers' capacity to serve the washing machine industry.



B. J. Hank

Although the policy as outlined by Donald M. Nelson leaves the door open for "new comers" in the appliance fields, it is expected that components will be allocated to present manufacturers until their prime needs are met.

In closing his remarks, Mr. Sayre said that even though we are most anxious to get into production on appliances badly needed by the consuming public, "we would not want, under any circumstances, to convert while our boys are fighting overseas if it were to harm war production in the least."

Bernard J. Hank, president of Conlon Corporation, and chairman of the OPA Industry Advisory Committee, indicated that the pricing organization is studying cost increases as they

may affect pricing policy for post-war.

W. Y. Elliott, of OCR, has indicated the need for washers *now* as being essential *with* the war. In this connection it was pointed out by Mr. Hank that as yet there is no pricing policy established for the transition period.

Hank elected treasurer

As the result of an election held during the meeting, Mr. Hank was elected to the post of treasurer.

In a report prepared on the activity of the Association's Sales Estimation Sub-Committee, which was supplied all members, Mr. Hank reviewed estimates on backlog demand on post-war household washing machines, and indicated estimates were running as high as 4,261,000. "These estimates," said Mr. Hank, "will be reduced in proportion to the use of the optional spendable dollar to purchase other appliances. This brings us right back to the start of every manufacturing and merchandising program, that of offering the most possible in quality, features and style per dollar."

Mr. Hank deflated any belief that "our products will sell themselves for any length of time." For evidence of his committee's conviction that families will buy prudently when production for civilian use is resumed, he cited recent OCR nationwide survey findings that fewer than one-fifth of the households interviewed will dip into their *savings* to buy even one appliance.

Contract cutbacks and cancellations important

"Speaking for my company, and I'm sure you feel the same way, reconversion, removal of government equipment and material and settlement of contract cutbacks and cancellations are of real concern," he said, keynoting another group of immediate problems confronting his industry. To indicate the seriousness of reconversion he stated the case of a hypothetical "X Company," an example drawn by Louis C. Upton, president of the 1900 Corporation, St. Joseph, Mich., to show that losses are practically inevitable in the changeover and to emphasize the need

for prompt Washington action.

"On the basis of this fictitious company doing \$500,000 a month war work for the first quarter of a year, with the second quarter taken up by reconversion, if civilian production should start in the next, or seventh, month at \$100,000, then \$300,000, next \$400,000 and finally \$500,000 monthly through the fourth quarter, the loss, with both war work and civilian business gross profit figured at the same rate, would be \$344,900 for the entire year," he said.

"All estimates of backlogs, replacement sales and so on will be reduced, moreover, in proportion to how much higher our postwar costs are than our prewar figures," Mr. Hank said, amplifying his prediction that postwar sales volume will not come up to various current estimates.

Wage rates a factor

"Admittedly all business men are concerned about how much higher postwar labor costs will be, since their level affects sales. Richard T. Frankenstein, head of the C.I.O.'s automobile and aircraft workers' union, asserts that higher straight time pay will be necessary, to maintain purchasing power which will be reduced by the loss of overtime payments. On the other hand, the consumer has repeatedly demonstrated his, or her, ability to make articles last well past their normal period of usefulness. If virtually unlimited wage costs force prices of such articles to unreasonably high levels, the consumer may continue to make his old possessions 'do' for another year or two.

"It also is contended that rigid wage rates will make it more difficult to correct war and postwar inflation. The alternative to reducing wages would be to lay off employees."

Decentralization of population, temporarily checked by the war, will be accelerated, in some areas by as much as a generation, because of the construction of many war plants in new locations outside cities, Mr. Hank predicted. War-time workers' movements have hastened a shift of population south and west, he said, adding that on the basis of present evidence southern and western cities

have better prospects of expansion after the war.

"Many wonder if government-owned manufacturing facilities will disrupt business after the war," Mr. Hank said. "Of course some portion will be usable in our normal operations. It is estimated that probably not more than \$5,000,000,000 worth can be readily transformed into peacetime factories, but since that figure represents only about two years' normal investment in plant expansion, the end of the war may find the country under-equipped, rather than over-equipped."

Sales training a man-sized job

The problem of sales manpower is another demanding early solution by industry, Mr. Hank declared. "We have a real man-sized job cut out for us," he said. "Deaths, old age, changes to other lines and few replacements, all tell their story. With higher taxes a greater certainty than before the war, the only sure answer is greater productivity at the lowest possible cost, and distribution at the most economical figure possible.

"No one can plan sales or production without considering the effect upon them of Federal taxes. Whatever money Mrs. American Buyer has left after paying living costs and taxes represents the optional spendable money we can compete for. The higher living costs and taxes climb without a corresponding increase in gross income, the smaller is the amount left and the more keen com-

petition becomes for it, within and without our industry."

Good Housekeeping survey

Helen W. Kendall, Home Laundering Specialist, Good Housekeeping Institute, New York, offered some timely suggestions to this manufacturing group based on a consumer survey conducted by Good Housekeeping Magazine, in which trends in women's preferences were adequately covered.

Women who do not own washing machines are strongest in their determination to buy them at the first opportunity, according to the survey.

Intention to buy, among non-owners, was expressed by 53.6 per cent of all the families interviewed. Non-owners planning to buy hit a high in the \$2,000-\$3,000 yearly income bracket, where 63.1 per cent intend to mechanize their laundering as soon as they can. In the over \$5,000 group, 43.5 per cent will buy.

The investigation was conducted among the members of a consumer panel of 7,500 homemakers, located in 842 towns and on 455 rural routes throughout the United States.

That there is nation-wide interest in the activity of the Washer and Ironer group was evidenced in the fact that many of the leading publishers of general and women's publications were represented. This group has taken a strong lead in planning for the future without affecting war production, and as a result has the interest of both Government agencies and the press.

This sketch offers a suggestion for storage space in the kitchen for an ironer.





Kitchen Planning

By Virginia Hart • KITCHEN PLANNING CONSULTANT, SERVEL, INC., EVANSVILLE, INDIANA

THERE is nothing new about kitchen planning. It has been tried and proved successful by some organizations, while others have not done as well with it.

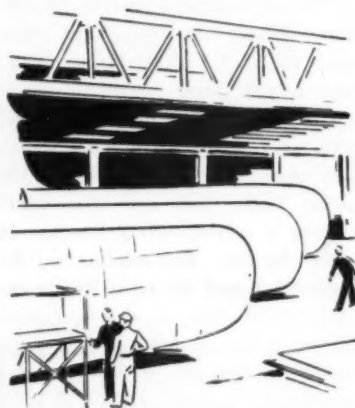
Perhaps those companies who have done little with it have worked on the philosophy that the mere phrase, "kitchen planning", was a sort of magic formula that would produce results with no effort. Many home service departments felt that when they announced the kitchen planning program the public would storm their doors to buy new appliances on the strength of a small sketch with suggested color schemes.

Work studies and counted footsteps

When the problem of kitchen planning has been approached in this manner it has seldom paid off because it has turned out that the mere words aren't magic, but the *right kind of kitchen planning will work wonders for the average housewife.*

In the postwar world the market for these wonders is going to be broad, and planned kitchens have earned their place as essential in good houses. Through all the model kitchens and the research that has been done in them on work studies and counted footsteps, women have found that a kitchen can be a work unit which co-operates to save time and trouble if planned properly. Despite the confusing arguments over plan-

ning theories, most housewives realize it is planning which makes the kitchen an easier and more comfortable place in which to work. There is no doubt that the demand for planned kitchens is as certain as women's desire to save their own time and effort.



... work spaces will be judged by the standards of a good production line...

The advantage of good planning in a kitchen will be more important than ever after the war; first, because of what has happened to women who work in kitchens, and second, because of what is going to happen to the houses the kitchen will be in. Many women are definitely sure now about what they want in the way of kitchen planning, for these are the women who have worked in war plants and have learned for them-

selves what carefully planned working arrangements such as a production line can mean in the line of time, effort, and comfort. It is these same women who will just naturally judge their work spaces at home by the standards of a good production line. They will be very quick to seek every advantage of skillful planning.

Other women who haven't had the experience of industrial war work have been learning for the first time during the war period, just what it means to keep a household running single handed. Many of these women will choose, when the war is over, to keep right on doing their own work because of the peace and freedom it gives their household. But they, too, will have very definite ideas about the kind of houses they can manage



... many women will keep right on doing their own work single handed...



... these appliances will be the backbone of the post-war kitchen ...

alone. They will know just exactly what every feature of good kitchen planning can mean to them.

Just what will happen to the post-war house is the \$64 question today. There are all kinds of answers which will be both right and wrong, but certain changes seem inevitable. The economics of "getting more house for your money" is a matter of getting more house in the same space and that in turn comes down to the "open-type" plan.

In the "open-plan" house

The kitchen in an open-plan house must be carefully arranged to make the most of the allotted space and then it must also be carefully related to the other areas of the house. For the kitchen is no longer a shut-away space — it is part of a balanced plan for use and appearance.

Another safe guess is that many postwar houses will not have separate



dining rooms. The low time value of a dining room which is used only two or three hours a day makes it an extravagance in the small house. Comfortable dining space (no more crowded nooks and alcoves) will be planned in connection with the living room or kitchen. The kitchen which is to double for dining takes skillful planning lest the result be just another case of eating in the kitchen.

Whether or not the experts finally agree, there will certainly be many houses built without basements. This will put the laundry on the first floor and in many cases right into the kitchen — another housing change which will have an indirect but very definite effect on the planning of the kitchen.

When the need for the specialized planning of kitchens first appeared about fifteen years ago, it marked the beginning of an important trend. Kitchen planning was the first popular application of "organized space." Since then baths, closets, basements and now the living rooms themselves have been given this sort of study and the space organized for use.

Meanwhile kitchen planning has developed from the early trial-and-



... post-war kitchens may even include a nursery for the children ...

error stages through a very standardized period which had rules for everything and all the answers in the book; the U-shape, L-shape, 2-wall and what-not type kitchen. Today kitchen planning seems about to come of age just in time for post-war building. As a mature and established study, it should be able to adapt standardized equipment to meet the particular needs of the postwar house and the postwar woman.

Kitchen "work centers"

The range, refrigerator and sink, however radically changed in looks and operation, will still be the backbone of the postwar kitchen, because these provide the functions you will always need to feed a family, unless you resort to "K" rations. Though these three appliances with their cabinets make the same familiar work centers, the patterns for arranging them in the kitchen will be much

Virginia Hart — author of this article, has been engaged in "kitchen-planning" for a number of years. Her work is well known to readers of "House & Garden," and in the utility field. From 1937 to 1942 Miss Hart was associate editor of "House & Garden," in charge of home equipment. Prior to that time she was associated with various phases of kitchen planning in the gas industry. In 1933 she edited "Modern Kitchens," a handbook of design and construction for A.G.A., and organized the Kitchen Planning Headquarters for the Philadelphia Gas Works Co. From '34 to '36 she was with Consolidated Gas Co. of New York, as kitchen-planning consultant, where she organized a kitchen planning service. In 1936 she designed and supervised construction of six kitchens for a national advertising campaign sponsored by A.G.A.E.M. She is now continuing her work as kitchen planning consultant for Servel, Inc.



... the home laundry may move up ...

more interesting and adaptable. No longer will we follow the same hard and fast rule for every kitchen, putting the sink under the window, the range here and the refrigerator there.

In many kitchens there might be advantages in setting the sink at right angles to the window wall, turning it right out into the room to form a low partition dividing the cooking area from a dining space. With this arrangement the sink is lighted ideally from the side rather than by a direct glare in front, and the window view or the children playing outside, are still within sight.

Use cabinets advantageously

No longer will we plan for a very long row of wall cabinets just because there is a very long wall space which must be filled to make it "streamlined looking." Nor will we box in the space above the cabinets just to make the kitchen look modern. Sometimes the tall storage cabinets which usually stand against the wall could serve a double purpose if they were turned right out into the room and so used to separate a small laundry from the cooking area of the kitchen. Or the base cabinets might be arranged so that with an ordinary folding gate they would form a play-pen space for small children, right in the kitchen but not under foot.

For a growing young family it might even be wise planning to provide a special "baby center" where the formula and baby laundry could be handled without interfering with the regular routine. Such a space would solve a common problem and should not be hard to plan. Through such adaptations experience and imagination will give a new flexibility to the old kitchen-planning formulas.

In some houses the kitchen and living room might be combined into one great comfortable living space, with a most respectful bow to the sound traditions of the Swedes. For country kitchens there might be a special corner for the fast-freeze unit and a work space for all the preserving, pickling and butter making that go on. In air-conditioned houses one kitchen wall might be deepened

to provide storage for vegetables, canned and dehydrated foods at the proper controlled temperature and humidity. This would bring the cold cellar right up to the kitchen where it belongs.

Of course all this talk of planned-to-order kitchens brings on a picture of merchandising and installation nightmare which could follow. It was partly to avoid such problems that earlier kitchen planning froze its solutions into the U-shape, L-shape and 2-wall kitchens.

There would be no reason to promote flexible kitchen planning in the appliance field now if such planning necessarily meant special "custom" work. But it doesn't. To be effective for the industry, kitchen planning must deal with packages, but the packages should be the three basic work centers—the range, refrigerator, and sink-water heater with their cabinets.

Kitchens can't be packaged successfully (except for low-cost housing) because they must be adapted to different houses and people, but work centers can be packaged successfully for they are simply the standardized units from which any number of different kitchens can be developed by good planning.

These three work centers neatly packaged, plus plenty of "know how" for combining and adapting them in kitchens would constitute the stock in trade for appliance manufacturers. The success of such kitchen planning will depend first of all on the packages themselves, what's in them and how they work—that is, how well the appliance industry engineers and designs its postwar appliances. Not all packages will sell no matter how prettily they are tied up. Given salable packages, a company's success will stem from how well it can adapt them to individual kitchen plans. For this the planners must know how, they must know more than color schemes, decorating tricks, and co-operating dealers.

The alert kitchen planner will have his share in the interest and excitement of the postwar building period for his problems will be geared directly to the times. New materials

with fabulous possibilities will suggest radical new answers to old problems. Construction and installation difficulties will be reduced by the technical developments of the last few years. The realm of possibility for kitchens will be wider than ever, and good planners will make the most of their day.

As his basic training the kitchen planner must learn all the combinations and arrangements for the three work centers. He must understand the requirements for each and be able to visualize them in different relationships. The efficiency of the appliances may be affected by different plans and he must be able to apply this data by rule of thumb. When he has mastered the fundamentals of his own three packages, the good planner will then branch out and learn the rest of his trade.

And this time he must really learn, not just get himself well smattered. He must know for sure and in detail about the materials and equipment used to complete the kitchen. His knowledge of sizes, prices, specifications, and installation must be accurate and up-to-date because it is at this point that kitchen planning as a service takes over.

Home planners need help

It is just because there is so much to know and find out about kitchens that customers find it confusing, and almost impossible to do alone, and consequently come to the gas company or service organization for help. This specialized knowledge, well salted with imagination, makes a good planner know how to turn out the kitchens that means business.

Obviously such planners don't just happen. They will be trained personnel, picked for their jobs because they have the training or the aptitude to visualize and execute plans, and an ability to catch other people's ideas.

Whatever time these planners spend beforehand learning the ropes will be well worth while, for then they will start out as specialists working directly in the line of sales, not for any one appliance, but for complete kitchens.

Pressed Metal Institute

elects new officers

ELECTION of the following officers at a recent meeting of the Pressed Metal Institute held in Philadelphia at the Hotel Barclay is announced: F. C. Greenhill, vice president of the Acklin Stamping Co., Toledo, Ohio, was elected president of the Institute, succeeding the retiring president, George E. Whitlock, president of Mullins Manufacturing Co., Salem, Ohio.



F. C. Greenhill, president

J. H. Robins, president of the American Pulley Co., Philadelphia, was elected first vice president of the Institute, and Tom J. Smith, Jr., of Cleveland, Ohio, and Huntington, W. Va., was appointed executive vice president. Three new trustees were also qualified: C. W. Custer, The American Stamping Co., Cleveland, Ohio, chairman of the Cleveland district, C. W. Cederberg, Larson Tool & Stamping Co., Attleboro, Mass., chairman of the New England district, and V. S. Morrison, Morrison Steel Products, Buffalo, N. Y., chairman of the New York State district. District chairmen are representatives of their districts by Institute constitutional procedure.

Institute progress reviewed

Progress of the Institute was reviewed and the trustees were unanimous in the opinion that the organization is making a very substantial

contribution to the stamping industry, and that it should play a conspicuous part in the pressed metal industry in the postwar period. It was pointed out that membership already embraces representative concerns from coast to coast and is growing steadily. It was stated by Mr. Greenhill, on the basis of progress achieved in the past fifteen months, that the desirability of a strong industry association has been fully demonstrated.

The organization of district groups in nine areas has reinforced the structure of the organization and provides local forums for the discussion and alleviation of area problems. Regular meetings of these district groups are being held, including explanations by competent authorities of the government regulations of such agencies as WPB and OPA. Competent study and able presentations of practical matters pertaining to engineering, production, cost accounting and other problems are being made. Special attention is given to postwar plans, including surplus material disposal, competitive materials and methods, and new markets.

Educational campaign sponsored

Accomplishments of the national organization during the past year that were highlighted at the Trustees' meeting included cooperation extended to the Army and Navy in obtaining speedy action in locating sources of stampings. It was stated that 120 different inquiries for stampings have been referred to the industry for action since January 1. Also results of the educational campaign conducted by the Institute to inform manufacturers, designers, engineers and others concerning the wide range of new developments and techniques in the pressed metal industry were emphasized. This effort has been distinctly worthwhile in the opinion of the trustees, and it was unanimously decided to continue and expand educational activities.

Trustees and officers attending the Institute trustees' meeting also attended the Philadelphia district meeting in the evening. More than seventy-five were present at this meeting, with J. H. Robins, chairman of the Philadelphia district, presiding.

To meet postwar demand for better, lighter and less expensive products, the stamping industry, capitalizing on advances made during the past four years, is, according to Institute spokesmen, in a position to offer constructive suggestions to appliance manufacturers.

It is presumed that the consumer will buy carefully and look for the best quality merchandise available. Close cooperation between the producers of steel sheets, stamping manufacturers, enamelers and appliance manufacturers is indicated if expectations of the public in quality re-



J. H. Robins, first vice-president

frigerators, washing machines, stoves, and other appliances are to be met. The stamping engineers say they welcome the opportunity of collaborating with designers in the early stages in order to determine how stampings may be used to maximum advantage in achieving desired appearance and functional improvements.

Daily inquiries are being received from manufacturers at the Institute headquarters in connection with the use of stampings in new products.

Foods will not discolor when stored in porcelain enameled ware pans.



P e

You are . . .

e from Bondage

WHEN CHICAGO VIT engineers assist you with your plans for reconversion, Chicago Vit has only one motive. That motive is to assure the production of a superior porcelain enameled product at the lowest possible cost. • We want you to have the most efficient plant layout. We want you to have the best equipment available regardless of who supplies it. We want you to employ the best possible processing. • Chicago Vit engineers are free to make such recommendations.

Chicago Vitreous Enamel Product Co.

1427 South 55th Court ★ Cicero 50, Illinois

Makers of Fine Porcelain Enamels

NEWS

Fluorspar production sets record

The fluorspar industry has established a new record of production during the past year. The total production for 1943 in terms of finished fluorspar was 433,000 tons as compared to 337,000 tons in 1942.

Shipments from mines were 13% greater than in the previous record year of 1942, and 54% greater than 1918, the peak year of World War I.

Capt. Willis returns to Pemco

After nearly four years with the services in the States, in New Guinea and Australia, Capt. "Jimmy" B. Willis has returned to the Technical Laboratories of Pemco Corporation, Baltimore.

Shortly after his graduation from Ohio State University, 1939, in Ceramic Engineering, Capt. Willis went to Pemco as an active member of their research staff in their Laboratories. In December of 1940 he was called into active service with a rating of Second Lieutenant. Stationed at Ft. Belvoir, Virginia from December, 1940, to June, 1942, he joined the Amphibian Engineers. He was made commander of a company and sent overseas to New Guinea. Because of illness he was evacuated to Australia and then returned to the United States. He was retired last month from active service.

At Pemco, Capt. Willis is reported

to be engaged in a highly specialized analytical development of unusual interest to the enameling industry.

DeVilbiss Company announces organization changes



Election of Howard P. DeVilbiss as president and general manager and of Allen D. Gutchess as chairman of the board and active senior executive of The DeVilbiss Company, Toledo, Ohio, was announced recently following a meeting of the Board of Directors. The new president had served for several years as vice president of the company, a leading producer of spray painting equipment, exhaust systems, air compressors, hose and connections. Gutchess has been president of the firm since 1929.

As board chairman, he succeeds W. M. Booker, who will continue as a member of the board.

Coincident with these changes, Frank A. Bailey, vice president and general manager who has been with the company for 34 years, is retiring because of poor health. Roy A. Guyer continues as vice president in charge of sales and becomes a director of the concern.

The company has also announced the appointment by Howard P. DeVilbiss of Don J. Peeps, of the engineering staff, as acting chief engineer.

With the election of 36 year old Howard P. DeVilbiss, the third man of that name heads the corporation. He is the son of the late Thomas A. DeVilbiss, president during one of the corporation's greatest periods of expansion, and grandson of Dr. Allen DeVilbiss, who founded the business in 1888.

It is reported that the Maryland Sanitary Manufacturing Corp. of Baltimore, Md., manufacturers of sanitary ware, stoves and ranges, have concluded arrangements with the Defense Plant Corporation for expansion of their plant. This expansion work is now said to be in progress.

General Steel Wares organization changes

F. S. Corrigan, formerly vice president and general manager of General Steel Wares, Ltd., Montreal, Canada, is now executive vice president. Wm. F. Holding, formerly vice president and comptroller, has been appointed vice president and general manager; and R. B. Taylor, formerly treasurer and assistant comptroller, succeeds to the position as comptroller.

Fourth Army-Navy "E" Award to Philco

For outstanding achievement in producing materials essential to the war effort, the Philadelphia plants of Philco Corporation have been honored with their fourth Army-Navy "E" award, according to word received from the Honorable Robert P. Patterson, Under Secretary of War.

To date Philco Corporation has received a total of thirteen "E" awards for its war production record, and the Company's output of war materials is at the highest level in its history. War goods being manufactured for the Army and Navy include radar equipment, electronic and radio communications equipment for planes, ships, tanks and the ground forces, bazooka rocket projectiles, shells and fuses, and storage batteries.

New O. Hommel assistant to the president



The O. Hommel Company of Pittsburgh, Pennsylvania, has announced that James F. McCrory, Jr., is now associated with their organization. Mr. McCrory's new position as Assistant to the President will be as Chemical Expert in coordinating the Company's war work and other chemical products. Mr. McCrory was attending Washington & Jefferson College when he entered the army and served two years in World War I. After his release he worked for Eaton Rhodes & Co. of Pittsburgh and Rogers, Brown and Crocker Bros. of Pittsburgh until 1929 when he became associated with the O. Hommel Co. In 1936 he left to become connected with the J. C. Ackermann Co., where he remained until July when he returned to O. Hommel in his new capacity.

James F. Howard, secretary and treasurer, and E. G. Gardner, in charge of manufacturing operations,

of National Enameling & Stamping Co., Milwaukee, Wisconsin, were recently made vice presidents of the company.

Donald Sharp to head Tappan Sales training program



C. V. McConnell, general sales manager of the Tappan Stove Co., recently announced the organizing of a retail sales training program, which will be directed by Donald S. Sharp, under the supervision of W. Hubert Tappan, vice president.

This new department, according to Mr. McConnell, is the outgrowth of many weeks of investigation of the training methods of other outstanding merchandisers, combined with methods which have proved successful with Tappan. The course will include fundamentals of retail selling, product structure and features, product use and effective demonstration.

Sharp, a 1934 graduate of Ohio University, was southern Ohio factory representative for six years. During the war he has been on procurement in the Quartermaster Corps, where he was concerned with the purchase of army field ranges, and later with the organization of a contract termination branch at Jeffersonville.

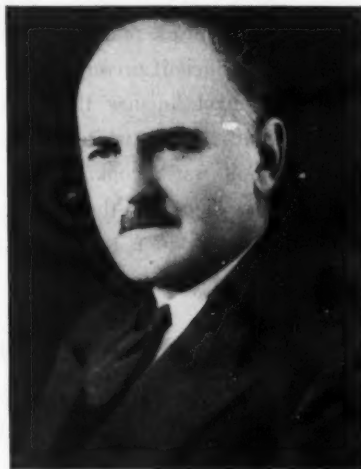
New director for Coordinated Gas Kitchen Program

H. Vinton Potter, formerly general sales manager of Fall River Gas Works Co., Fall River, Mass., is the new coordinator for the Gas Kitchen

Program sponsored by the American Gas Association's Post War Planning Committee, and combining the efforts of the manufacturers and utilities in the field.

Mr. Potter has been a member of the A.G.A. Refrigerator and Water Heating Committee, and New England Regional Director of the C.P. range campaign, and this year he was elected chairman of the Sales Division of the New England Gas Association—all of which offers a good background for his new position at A.G.A.

Philco appointment



Election of William Balderston, formerly vice president in charge of the commercial division, to the position of vice president in charge of operations, and a member of the Executive Committee of Philco Corporation, was announced recently by John Ballantyne, president.

Mr. Balderston attended the University of Wisconsin and saw service in the last war as an officer with the Lafayette Division. From 1919 to 1930 he was vice president and factory manager of the Ray-O-Vac Company of Madison, Wisconsin.

In 1941, Mr. Balderston was elected a director and vice president of Philco, with offices in Washington, to be in charge of the Company's important war work.

John J. Hall is now vice president and general manager of sales of the Richmond Radiator Co., Uniontown, Pa. Mr. Hall was formerly vice

to Page 35 →

In the lasting, gleaming finishes on Norge refrigerators...

PORCELAIN enamel finishes on Norge refrigerators retain their gleaming whiteness... resist chipping and marring... thanks in part to the use of LUFAX.

Lufax

OPACIFIER FOR ENAMELS

This highly efficient zirconium opacifier gives porcelain enamel finishes the advantages of extra toughness, extra whiteness, and lasting gloss. Hospital ware, cooking utensils, table tops, lighting reflectors—these are some of the other enameled products that are benefiting by these advantages.

LUFAX IS AVAILABLE

without restriction, because it is made from materials available in ample quantities. Use it to replace scarce tin oxide and antimony.

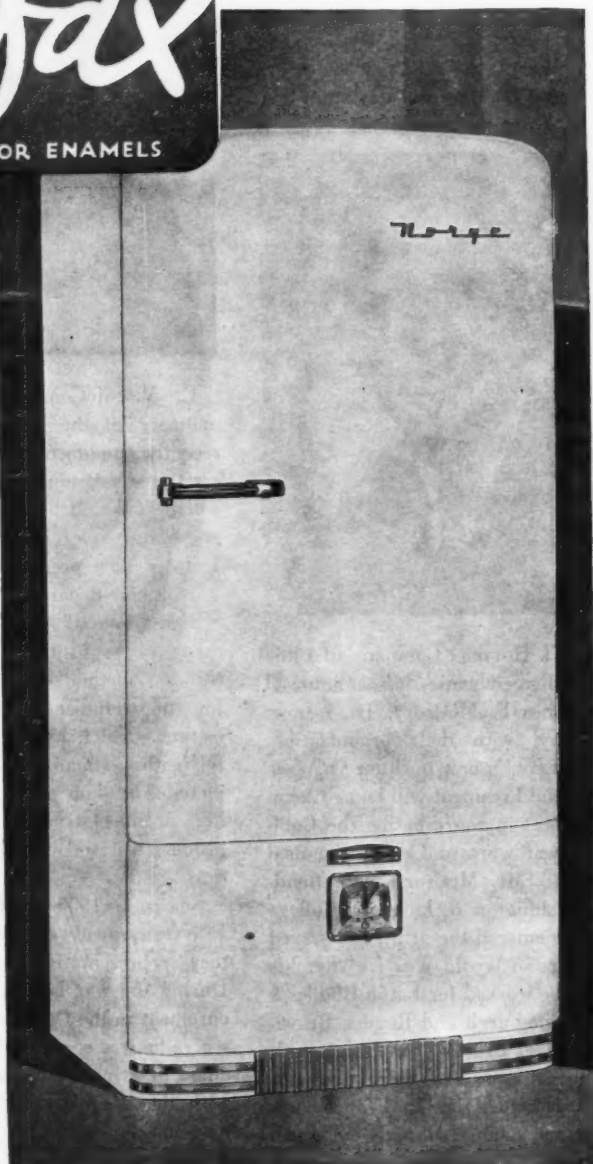
EVERY LUFAX PROVIDES THESE ADVANTAGES

- ✓ Greater thermal shock resistance
- ✓ Greater resistance to chipping
- ✓ Truer, whiter color
- ✓ Better working properties
- ✓ There is a LUFAX for all types of frits
—antimony-free or antimony-bearing,
regular or acid-resisting.

LUFAX is a trade-mark, Reg. U. S. Pat. Off.



3 awards to Rohm & Haas Company and its associated firms. The Resinous Products & Chemical Company and Charles Lennig & Company.



ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, P.A.

Manufacturers of Chemicals including Opacifiers, Plastics, Synthetic Insecticides, Fungicides, Enzymes, Chemicals for the Leather, Textile, Rubber and other industries.



president and general manager of American Radiator & Standard Sanitary Corp., New York.

McGee to Renown Stove



The appointment of Earl McGee as Works Manager of Renown Stove Company, Owosso, Michigan, has been announced by B. A. Nagelvoort, President.

Mr. McGee comes from Baltimore, Maryland, where he has been affiliated for the past thirty years with The Standard Gas Equipment Company, large manufacturers of gas ranges.

P. H. Bates, chief of the Clay and Silicates Products Division, National Bureau of Standards, has been elected president of the American Society for Testing Materials after serving as vice president during the past year.

Estate Stove uses "production army" idea

In order to minimize employee absenteeism in all departments of the plant, and to help insure maximum support of the invasion insofar as it might be affected by war products being produced by the company, Estate Stove introduced the "production army" idea early this year.

The principal idea behind the organization was the awarding of "commissions" to employees who are on the job every working day for prescribed periods. Two hundred and twenty-one men and women won their first shoulder bars in Estate's pro-

duction army by being on the job every working day throughout the months of February, March and April. Each of these workers now wears the "Lieutenant's badge" attached to his or her regular identification badge.

On June 1, 206 won a further promotion to the rank of "Captain." On July 1, 182 were made "Majors."

In this production army everyone started from scratch as a buck private on February 1. All new employees also start as privates. About the middle of each month promotions are announced, and everyone who has been on the job every working day of the preceding month is upped in rank.

The company reports that the workers have entered into the spirit of the program wholeheartedly and it has proved of unquestionable benefit to the company's war production program.

New enamel executive arrives

Mr. and Mrs. M. J. Keedy are the proud parents of a second son, James Addison, born on August 1. The future enameling executive weighed in at 8 pounds, 2 ounces. Father "Mort" is general sales manager of Ingram-Richardson Mfg. Company, Inc., Frankfort, Indiana.

New Mid-Western regional director for Mitchell-Bradford

The Mitchell-Bradford Chemical Company, Bridgeport, Conn., manufacturers of "Silco," report that following a survey of the possibilities in the Mid-Western area for its products they have appointed Mr. Wm. H. Price, Jr., as Mid-Western regional director.

Mr. Price has had experience in the engineering, service, technical and sales phases of the business, having first developed the Eastern Seaboard area for the company and later being located at Bridgeport where he organized a semi-national plan of distribution.

The company's Mid-Western Regional Office will cover a total of eleven states, with Mr. Price's temporary headquarters at 432 Roslyn

Place, Chicago 14—permanent address to be announced later.

In addition to the company's product, "Silco," an inorganic ceramic type coating recommended for curing temperatures as low as 350° F., the company has other products in the corrosion resisting coating field, and reports the handling of alkali and solvent cleaners. Emergency stocks will be warehoused in Chicago.

It is reported that C. J. (Hap) Ruhl, for several years with Mullins at Salem, Ohio, as foreman in tub stamping, and later as superintendent of tub stamping at Ingersoll Steel and Disc, Chicago, is now production superintendent of Cartridge Cases at Conlon Corporation, Cicero, Illinois.

27-year-old Armco ad found in Alaska



Technical Corporal Richard M. LeFever, former Armco employee at the Butler, Pa., plant, came back from Alaska recently on furlough, and brought with him a 27-year-old magazine advertisement representative of the early days of consumer advertising for "ARMCO Iron."

The corporal was in Alaska with Ordnance, looking after heavy equipment that the Army was using to build the Alcan Highway. Here's his story:

"It was wild, primitive country and one day my buddy and I decided to go bear hunting.

"Back in the hills we came across

an old deserted mine. Although the entrance looked unsafe, we ventured into the tunnel. Not far from the entrance we saw a three-foot stack of old newspapers, damp but legible. In the center of the pile was a magazine, a copy of *The Saturday Evening Post*. I opened it at random and there in front of me was the familiar Armco triangle. It was a full page advertisement of The American Rolling Mill Company, telling about the good qualities of ARMC O Ingot Iron. It was dated October 20, 1917. In those surroundings that old ad with its triangle was like a voice from my buddies at home in the mill.

"I tore out the page and saved it, thinking the folks at the mill would like to see it when I returned."

We understand that this original page will be framed and hung in the offices of the Butler Armco plant.

Twenty manufacturers to make CP gas ranges

The announcement that the A. J. Lindemann & Hoverson & Company, Caloric Gas Stove Works, Gurney Foundry Company, Ltd., Roberts & Mander Stove Company and Western Stove Company will make gas ranges meeting Certified Performance specifications, brings to 20 the number of manufacturers who will build post-war gas ranges bearing the CP Seal.

Appliance dealers to push better grade gas ranges

According to Lloyd C. Ginn, CP Gas Range Chairman for A.G.A.E.M., dealers who sold 68% of the 2,300,000 gas ranges produced in 1941 will concentrate on the higher grade gas ranges after the war.

Said Mr. Ginn: "Wartime experiences have proved to housewives that better ranges not only save food, time and fuel, but last longer and require less servicing expense. This is evidenced by field studies, and by the increasing number of inquiries about CP gas ranges being received from consumers and dealers alike.

"Our studies also indicate that more and more dealers are realizing the importance of informative grade

labeling and of promoting nationally advertised quality products that have consumer acceptance as the best means of meeting competition in the postwar era."

A breakdown on this 68% distribution of gas ranges sold in 1941 is as follows:

Furniture dealers	17%
Appliance specialty dealers....	23%
Hardware dealers	13%
Department stores	15%

Cribben's enamel superintendent to be married

O. J. Colletti, superintendent of enameling at Cribben and Sexton Stove Company, Chicago, is to be married on September 3. The bride-to-be is Miss Frances Anzelmo, a sergeant in the Women's Army Corps. The ceremony will take place at St. Phillip Benizi Church, with a reception at the Midwest Athletic Club. They will honeymoon in the East.

"Can what you can" is utensil theme



The canning of fruits and vegetables forms a theme for the latest publicity release by the Enameled Utensil Manufacturers' Council. In the release it is pointed out that there may be fewer cans of fruit on grocers' shelves next winter and that the point values might be high. Every homemaker is encouraged to regard this summer's canning as her own personal war job.

Says the E.U.M.C. release:

"For years, home canners have successfully used porcelain enameled ware utensils for every canning step because they are non-absorbent and

contain no minute pores in which food or bacteria may lodge to cause food spoilage. Porcelain enameled ware colanders, ladles, preserving kettles and utility dishes on which to set the jars while they are being filled are all handy helps for the homemaker.

"A boiling water bath is recommended for processing fruits, berries and tomatoes. For this, a large enameled ware kettle fitted with a rack to keep the jars one-half inch from the bottom of the kettle is ideal."

More News on Page 38 →

SEPTEMBER • 1944 finish

If you are prepared- *you can write your own ticket*



YOU enamelists have plenty of reasons for awaiting V-Day with supreme confidence.

30 million families have long been deprived of much needed equipment. Builders lay plans for a 10-year boom in construction. Makers of bathroom and kitchen equipment are hungry for a chance to resume. Countless merchants are awaiting the opportunity to modernize their store fronts, their shelving and cases. Advertisers will clamor for millions of colorful, weather-resistant signs.

And the trend is to porcelain enamel! There is no doubt about it. For permanence, colorful effects, easy cleaning and economy, nothing can beat it. That is your opportunity as we see it, and why we employ our own great advertising effort to sup-

port it. We are not overlooking the part we have earned in this business as producers of a superior base metal —U·S·S VITRENAMEL.

For, if the place U·S·S VITRENAMEL held in prewar manufacture is a safe indication, it is destined again to be a leading favorite. No sheets surpass these for ductility and flatness. None have a surface which

grips enamel more securely. None more consistently reduce rejects and losses.

The reason for this quality is our intense specialization, following continuous research into enamelists' requirements. Make note of that name —U·S·S VITRENAMEL. We are sure we can meet your needs. For further information just give us a call.

U·S·S VITRENAMEL SHEETS

CARNEGIE-ILLINOIS STEEL CORPORATION

Pittsburgh and Chicago

Columbia Steel Company, San Francisco, Pacific Coast Distributors
United States Steel Export Company, New York



UNITED STATES STEEL

Founder of A-B Stoves dies

Paul Coleman DeVol, one of the founders of A-B Stoves, Inc., and for 35 years secretary and treasurer of the company, passed away at his home in Battle Creek, Michigan on Sunday, July 16.

Together with the late Frank K. Berry and the late Jack Alexander, Mr. DeVol founded the stove company, which took its name from the first letters of Alexander and Berry. At the time of the company's founding Mr. DeVol was made secretary and treasurer, and he held that position until about a year ago when he retired from active business because of failing health.

Friends considered it fortunate that he was able on the Friday preceding his death to attend the ceremonies accompanying the awarding of the Army-Navy "E" to the company. Mr. DeVol was among those on the platform during the ceremonies and described the occasion as "one of the happiest days of his life."

New sales manager for Grand Home Appliance Company

The appointment of W. L. Marshall as sales manager of Grand Home Appliance Company, Cleveland, was recently announced by James Mitchell, company president. Some of Mr. Marshall's previous business experience was gained with RCA-Victor; as vice president and general manager of a well-known advertising agency in Chicago; and in an executive sales capacity with Arnold Schwinn Company, Chicago bicycle manufacturer.

Don Sweely has new daughter

Finish learns of the arrival of a daughter at the home of Capt. D. B. (Don) Sweely, son of B. T. Sweely, vice president in charge of research at Chicago Vitreous Enamel Product Co.

Penny Kay Sweely was born July 23 — weighed in at six pounds — and according to all reports, favors the Sweely side of the family.

Don, who recently returned from overseas following 25 missions as pilot of a Flying Fortress, is now lo-

cated in the South as an instructor. His exact duties were not released for publication.

Ferro Enamel to build new West Coast plant

Plans for a new manufacturing plant, to be located in the Los Angeles area, were announced by Robert A. Weaver, president of Ferro Enamel Corporation, August 15.

The new plant, according to Mr. Weaver, will produce porcelain enamel frit and synthetic-enamel industrial paints. In addition, the complete line of other Ferro products — such as clays, oxides, chemicals, driers and various supplies — will be warehoused at the new plant, and distributed throughout the western states and foreign countries bordering on the Pacific. Engineering service will also be available.

Mr. John A. (Jack) Rumer, long identified with Ferro and for the past ten years the West Coast representative, has been appointed manager of the new operation.

The rapid industrial growth of this area in the past few years, and the prospect for continued growth after the war, were points which influenced Ferro's directors. The decision to build the new plant, said Mr. Weaver, was reached only after recent first-hand surveys of West Coast business by Ferro officials. Ferro hopes to have this, their ninth frit manufacturing unit, in operation in ample time to take care of early civilian goods production after the war.

Friedrich plans refrigerator production

In a recent advertising release from Ed Friedrich Sales Corp., San Antonio, Texas, it is stated "Victory Is Our Business Now — But by September, possibly before, depending on war developments, Friedrich will have completed our current vitally important U.S. Contracts.

"This means that we should have some genuine floating air refrigerators by the end of the year!"

"Thus, the end of the long wait for Friedrich equipment by merchants all over the country seems in sight."

Ordnance distinguished service award to Battelle Institute

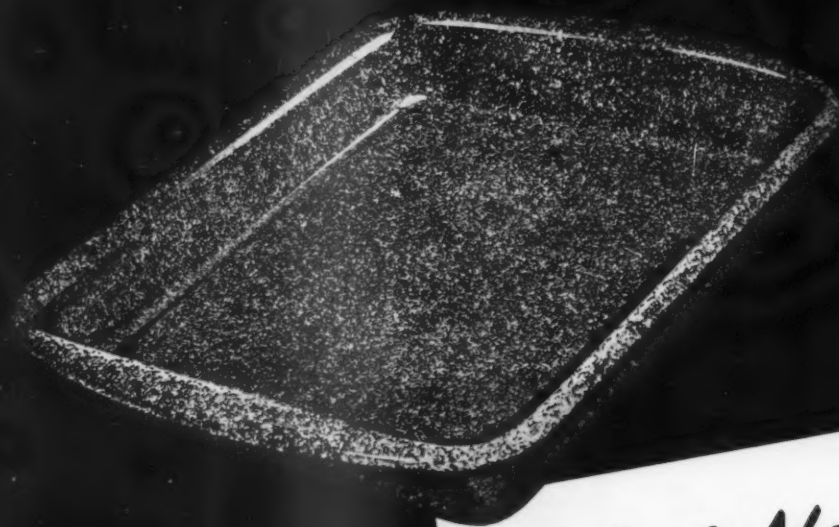
The War Department has granted the Ordnance Distinguished Service Award, for outstanding contributions to Ordnance progress during the war, to Battelle Institute, Columbus, Ohio, research organization, according to recent announcement.

Battelle Institute has been actively engaged in research for the Army and Navy and other governmental war agencies since the early days of the war, according to Director Clyde Williams. It has conducted research for the Ordnance Department, the Bureau of Ships, the Army Air Corps, the Watertown Arsenal, the War Production Board, the Defense Plant Corporation, the Office of Scientific Research and Development, the National Defense Research Committee, the National Academy of Sciences, and others. Numerous reports on scientific developments have been issued to military and other governmental authorities, and Battelle developments have been incorporated into the machines and production processes of war.

In addition to its government-sponsored research, Battelle has been working continuously on scores of war research projects for private industry. Its industrially sponsored war work has included research for major firms in the ceramic, metallurgical, chemical, mining, and aircraft industries. Contributions to the manufacture of guns, ships, airplanes, ammunition, machine tools, war chemicals, and fuels have resulted. Considerable research work upon which the military forces base tactical operations has also been conducted, Mr. Williams added.

The Institute's technologists have made many contributions to the home front concurrently with contributions to the fighting forces. Problems of salvage, conservation, and substitution of materials have received at-

to Page 40 →



Intriguing new colors and color effects are now available for oven liners. Lighter . . . brighter . . . yet easy to keep clean.

Style Note

FOR
POSTWAR RANGES

The Early Postwar Period may well see the end of *somber* oven liners in American-built Ranges. And in addition to gay speckled patterns, look for *lighter basic colors*—a marked contrast from Cobalt Blue.

Ferro's recent development of *colored groundcoats*, now carried a step further with speckles fired at the same time, makes possible a wide variety of handsome, new color effects in oven liners and other products.

Highly resistant to heat, impact and wear, Ferro's new Colored Groundcoats compare

favorably with the finest groundcoats produced. Bonding qualities are exceptionally good . . . and, best of all, these new enamels may be fired at the same temperatures as cover coats.

A typical example of this interesting new finish is shown in the illustration above. Actually, many colors—and combinations of colors—are available for your use.

Write today for full information. Also let us know what colors you are especially interested in.

Another
ONE-BURN
Finish by
Ferro

FERRO ENAMEL CORPORATION

4150 EAST 56TH STREET



CLEVELAND 5, OHIO

→ from Page 38

tention. As headquarters of the country's largest program of coal research, it has devised methods of utilizing coal in industrial processes to supplement gas and oil, effecting savings of these war-vital fuels.

Mr. Williams is chairman of the War Metallurgy Committee, of the National Research Council and National Academy of Sciences, which coordinates the country's wartime metallurgical research, and many

other Battelle men have served in wartime advisory capacities to the government and industry, it was pointed out. In addition the Battelle staff has prepared two technical books — one at Navy request — which have been widely used as war production guides.

The Distinguished Service Award will be presented Battelle at a public ceremony on a date not yet announced.

Photographic "quiz shot" for the "camera bugs"



This "double exposure" photograph was taken in Cleveland at the time of the Porcelain Enamel Institute Annual Meeting. It shows the Market Development Committee in session for discussion of the advertising and promotion program which is being sponsored by the P.E.I.

Those in the photo, viewing clockwise, are: Edward Mackasek, managing director of the P.E.I.; Bob Ritchey, manager of the Market Development Division of the Sales Department, Carnegie-Illinois Corporation; Ray Dadisman, manager of the Marketing Development Division, American Rolling Mill Company; John Sweeny, Walker and Downing, advertising agency, Pittsburgh; Pierre McBride, president, Porcelain Metals Corporation of Louisville;

and Lee English, of Walker and Downing.

The over-print effect on the face of John Sweeny and others in the photo resulted from a double exposure made on the camera with which it is "impossible" to take double exposures. You will also see the faces of some of the committee members super-imposed on the advertising material at the top of the photo.

The camera used is the property of Mr. Sweeny; photo by *finish* photographer.

For foods that must be cooked slowly or simmered, porcelain enameled ware is best, it is agreed by cooking experts.

New Detroit Vapor district managers

S. M. Adams, sales manager of Detroit Vapor Stove Company, Division of Borg-Warner, has announced the appointment of P. W. Blew, G. A. Gilmore and H. C. Altenburg as district sales managers.

New chief engineer at Moore Corp.

Warren A. Stuckey has recently accepted a position as chief engineer of Moore Corporation, Joliet, Illinois, to take charge of engineering, research and development work for the company. Mr. Stuckey's previous experience was gained with the Milwaukee Gas Specialty Company; Florence Stove Company, Kankakee, Illinois; and in the stove division of National Enameling and Stamping Company, Milwaukee.

Cooking odors to go

In a recent report of the Post-War Planning Committee of A.G.A., one of the recommendations calls for the elimination of cooking odors by catching them in concentrated form at the source. It stated: "Modern homes of the future will require elimination of cooking odors irrespective of the fuel used. . . ."

"The small, compact, insulated home of the future will require that the problem be solved. . . ."

"When ventilation is attempted that does not catch these odors and vapors at the source, only a partial solution of the problem results. Such methods tend to catch only part of the greases and vapors after they have been diluted by the air in the kitchen and have already deposited some of their stain on the walls. . . ."

New type asbestos mitts—maybe

A considerable increase in asbestos cloth production for major Navy requirements is expected as a result of a newly-developed asbestos-fibrous glass cloth, it was reported at the recent meeting of the Asbestos Textile Industry Advisory Committee.

Since increased Navy requirements for asbestos cloth have caused asbestos textiles to become a critical bot-

to Page 44 →

News from Washington

50,000 bathtubs for Third Quarter

Order L-42, Direction 3 as amended August 1, 1944, provided for the production of 50,000 bathtubs for the third quarter. Its directions tell by whom and for what purpose the bathtubs may be made without utilizing labor in critical labor areas, and provides for the production of 10,000 recess type cast iron bathtubs by each of five manufacturers. These manufacturers are:

American Radiator & Standard Sanitary Corp., Louisville, Ky.
Crane Company, Chattanooga, Tennessee.
Eljer Company, Salem, Ohio.
Kohler Company, Kohler, Wis.
Richmond Radiator Company, Uniontown, Pa.

Bathtubs may be delivered only to fill orders for ultimate delivery to the Army or Navy, for export authorized by the F.E.A., or approved installation on projects covering specified ratings.

The tubs can not be delivered to jobbers or dealers for inventory, and no jobber or dealer may accept delivery of the tubs unless he has in his possession an order calling for delivery of the tubs to an authorized project or building within the classifications outlined.

Monthly reports are required of each manufacturer, to be filed on or before the 10th day of the subsequent month.

Plumbing and Heating Advisory Committee

In view of the war demands upon the industry, plumbing and heating manufacturers see no early hope for the expansion of their civilian production, the Plumbing and Heating Industry Advisory Committee has reported.

Committee members, however, expressed the need for speedy authorizations to resume civilian manufacture as soon as cutbacks in military production liberate manpower, materials and facilities.

Committee members discussed the

four reconversion orders, three of which already have been issued and the fourth due about August 15. These four orders are designed to enable industry to prepare now for limited reconversion.

In a discussion of the second order, which permits manufacturers to produce post-war experimental models, Committee members suggested that they also be permitted to develop patterns and dies for new models.

They pointed out that such a provision would enable manufacturers to be prepared to begin production of new models just as soon as civilian production is resumed or expanded. Labor that is not utilized during slumps in war work could be used to develop the new patterns and dies, members said. The industry representatives explained that the \$5,000 a month permitted each plant in developing experimental models would go a long way toward getting dies and patterns set up for new models in the plumbing and heating industry.

Committee members pointed out that during periods when their war work has fallen off or has been delayed because of material shortages, they are confronted with the problem of keeping their labor force intact. Plumbing and Heating Division officials explained the benefits of the proposed "spot order," which will establish procedures by which individual manufacturers may get permission through WPB field offices to make civilian articles not now allowed.

It was pointed out that at present the shortage of manpower and such critical materials as sheet and plate steel and copper rods for military production are the principal problems of the industry.

Crating for bathtubs

Restrictions on the use of better than No. 3 quality grades of lumber for crating cast iron bathtubs have been removed from Direction 3 to Order L-42, Plumbing and Heating Simplification, since the lumber control order, L-335, now provides for

control of the quantity and type of lumber to be used by each industry, for shipping as well as production, the War Production Board reports.

Hot water storage tanks

Hot water storage tanks and expansion tanks no longer require preference ratings for purchase by consumers, the War Production Board announced.

Action was taken to remove restrictions on the sale of hot water storage tanks because such tanks are used mainly to replace existing tanks which can not be repaired.

Changes in OPA regulations on cooking and heating stoves (Amendment No. 1 to M.P.R. No. 64)

Several changes in the regulation governing ceiling prices of domestic cooking and heating stoves, designed to improve the methods of price control for these household articles, have been announced by the Office of Price Administration, effective August 16.

The following changes and definitions are included:

1. The definition of a domestic cooking or heating stove now includes "a new stove of the type commonly used in households, camps, or trailers for cooking or heating purposes, regardless of the fuel or power used. It includes all space heaters other than floor or wall furnaces or heaters intended to be built into or permanently attached in a building. For example, it includes station heaters, caboose stoves, and school heaters. It does not include electric stoves under 2½ kw."
2. Part of the original definition of the term "manufacturer" is deleted by the new amendment. The section as previously worded did not include as a manufacturer, a seller of private brand stoves to jobbers or distributors if he also sold to retailers or users.

The adjustment provision for hardship cases has been revised to bring

it into conformity with the "hold-the-line" order. To this end, it is now required that in order to qualify for an adjustment a manufacturer must not only give evidence of hardship, but also show that if his production is lost, consumers will ultimately have to pay higher prices for comparable stoves. The measure of the adjustment that may be granted is limited correspondingly. It is further provided that manufacturers who apply to OPA for an adjustment of prices must show that their operations will be at a loss within 90 days, instead of 30 days, as originally specified. The 30-day period has proven too short a time within which to project accurately the profits and losses in the stove industry.

New provisions added to the regulation include:

- (1) A requirement that price lists, catalogues, and notices to the trade be filed with OPA within ten days after they are issued.
- (2) A provision for the issuance of orders of general applicability to modify provisions of the regulations as applied to classes of commodities or persons subject to its provisions.

Commercial refrigerator production to depend on availability of steel

A proposed revision of Limitation Order L-38, covering industrial and commercial refrigerating and air conditioning machinery and equipment, was discussed at recent meetings of the General Refrigeration and Air Conditioning and the Commercial Refrigeration Industry Advisory Committees.

Both groups agreed that the revision of the order should be made because it will provide a more flexible framework within which manufacturers may operate.

Both Committees received preliminary reports on the Bureau of Census survey of 1940 operations of refrigerating and air conditioning industries.

The Commercial Refrigeration Committee discussed a proposed program for the manufacture of a limited

number of display cases. It was agreed that any such program should be adopted only if sheet steel for such cases is available and if the production would not divert manpower from war work.

Chemical and allied products

An amended version of Appendices A, B and C to Order M-300, incorporating all the changes which have been made since the issuance of the appendices on June 6, 1944. Designed to be used as a reference sheet, the appendices contain an outline of allocation requirements of all materials controlled by Order M-300, the general allocation order for chemicals and allied products.

Repair status of household appliances

The Office of Civilian Requirements, War Production Board, have presented a review of repair status, age and quantity in domestic uses of 23 household appliances and items of equipment.

The material was recently compiled from findings of the Third Survey of Consumer Requirements, made during April for OCR by enumerators of the Bureau of the Census. Results are based on replies from about 4500 households, geographically and economically representative of the nation as a whole.

Of the twenty-three appliances and items of equipment covered by the survey, radios stand out as the item most in need of repair, followed by *oil cooking stoves*, vacuum cleaners, *washing machines*, *wood-burning cooking stoves*, *electric cooking stoves*, electric irons, sewing machines, *wood-burning heating stoves* and oil burners.

Although more than half of the appliances are five or more years old, the percentage found to be in working order ranges from 85 per cent in the case of radios to 99 per cent in the case of several items of heating equipment.

Refrigerators and washers

Of the heavier household appliances, mechanical refrigerators stand

first in estimated number in American households — about 21,000,000. Owners report that 98 per cent of these items are in working order, that repairs were required during the first three months of this year for nine per cent, that slightly more than half of the repair demand was met. The period covered by the survey was the least active season for refrigerator repair. Sixty-three per cent of domestic mechanical refrigerators are five years old or older.

Eighteen and a half million washing machines are estimated to be in households. Ninety-five per cent of these washers are in working order; although 72 per cent of them are five or more years old. Of the 16 per cent of owners who have tried to obtain washing machine repairs since January 1, more than two-thirds have been successful.

Cooking stoves

Of the 20,000,000 gas cooking stoves in households, 99 per cent are in working order, but seven per cent of them needed some repair this year. Fewer than half of those seeking repairs for this item reported success. Sixty-seven per cent of all gas stoves in domestic use are at least five years old.

Cooking stoves other than gas — electric, oil, wood — total about 21,000,000 in household use and, by type, from 94 to 97 per cent are in working order. About 15 per cent of owners sought repairs during the first three months of 1944, with about 70 per cent succeeding in getting repairs. Fifty-nine per cent of the electric stoves and oil stoves are five or more years old; 74 per cent of the wood-burning stoves are in that age group.

Heating equipment

Of the approximately 36,000,000 heating stoves — gas, electric, oil and wood — used in American homes, the proportion in working order is over 95 per cent for each type. From 49 to 59 per cent, depending on the type, are five or more years old.

Water heaters of all types — gas, electric, oil and wood — of which about 14,000,000 are in households,

to Page 50 →



TAKE THE BULGE OUT OF ASSEMBLY COSTS

with an Enameling Sheet that's processed to Stay Flat

Level down your assembly costs to a new low—with the help of an enameling sheet that is made to take fabrication and repeated firings without warping, sagging or twisting. Specify Toncan Enameling Iron with permanent flatness.

In producing a sheet that comes flat and stays flat, Republic not only helps to speed assemblies and cut assembly costs but also to improve workmanship and reduce rejects to a minimum.

Toncan Enameling Iron can be processed for deep drawing, too. It can be made to take the most severe fabricating methods—or

to provide exceptional welding qualities—or any combination of all these properties.

No matter what your enameling sheet problems may be or what special sheet characteristics are required, Republic technicians can meet your needs with a Toncan Enameling Iron exactly processed to your job. They are experts in metals and enameling

practices and have a long record of profitable results.

Toss your enameling sheet problems into Republic's lap and put the responsibility for results up to us. Many enamelers have profited that way.

REPUBLIC STEEL CORPORATION
 GENERAL OFFICES • CLEVELAND 1, OHIO
 Berger Manufacturing Division • Culvert Division
 Niles Steel Products Division • Steel and Tubing Division
 Union Drawn Steel Division • Toncan Steel Company
 Export Department: Chrysler Building, New York 17, N. Y.





A DEPENDABLE *Buying Guide!*



Electrical dealers and their customers are looking for the T-K "Symbol of Service" on the cooking and heating appliances they buy! A powerful T-K advertising-merchandising campaign is creating ready acceptance for electrical appliances equipped with T-K cooking and heating devices. T-K Electric Range Heating Units have long been standard equipment for the big majority of America's Electric Range Makers. T-K units also lead the field for replacement and reconditioning. Cash in on our forceful campaign. Capitalize upon the popularity and reputation of the T-K "Symbol of Service." Let it appear prominently on all of the heating units in the Electric Ranges you make. Write us about your immediate and post-war needs and ask about the new T-K Perpetual Heat Control.



TUTTLE & KIFT INC.

GENERAL OFFICES AND PLANT

1825 NORTH MONITOR AVENUE • CHICAGO 39, ILLINOIS

Makers of Electric Heating and Cooking Devices

→ from Page 40

bottleneck in war production, officials of the Cork, Asbestos and Fibrous Glass Division said that the new cloth will reduce this bottleneck. Navy representatives at the meeting indicated that the fibrous glass cloth is satisfactory for pipe lagging, an important Navy need.

Private building increasing

F. W. Dodge Corporation reports that while construction contracts, awarded in 37 states east of the Rocky Mountains during the first half of this year, totaled \$960,221,000 compared to \$1,851,272,000 for the first six months of last year, privately owned projects showed a worthwhile increase. In the first half of last year private building represented only 13% of total contract awards, or \$239,312,000. For a comparable period this year they represent 25% of the dollar value, or \$243,543,000.

New Literature

Five Minutes of Sales Facts

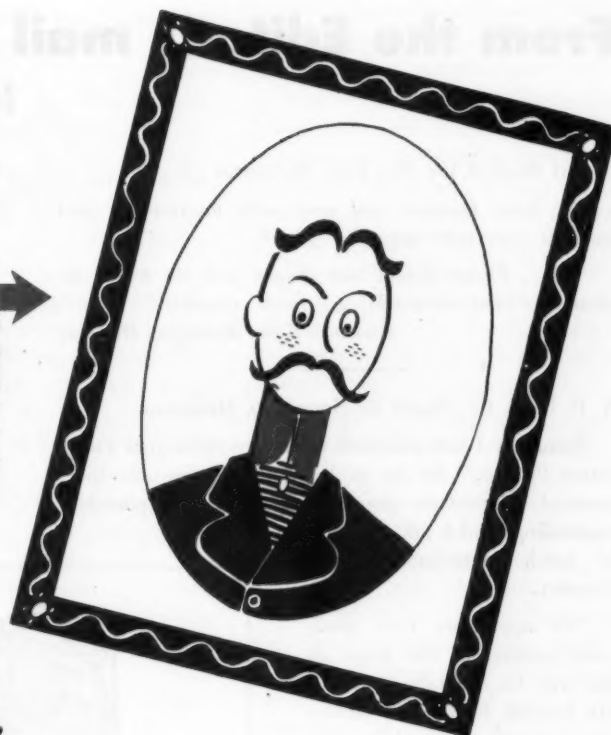
This is the title of a new colorful, eight-page booklet just released by the Porcelain Enamel Institute to help the retailer and his salesmen sell more porcelain enameled products as war-time restrictions are released.

Requiring a reading time of only five minutes, this little bulletin of sales facts contains quick information, with no words wasted, on how to increase sales of porcelain enameled products. Enough sales points are included to convince a prospective customer that modern porcelain enamel is the most practical finish for all household appliances. It covers such points as durability, color, sanitation, ease of cleaning and acid resistance, and illustrates easy methods of demonstrating these qualities in the show room or in the home.

Mail your request for copies of this new publication direct to the Porcelain Enamel Institute, Department "E", 1010 Vermont Avenue, N.W., Washington, 5, D.C. Ask for "Five Minutes of Sales Facts."

Fashionable STEEL COLLARS

The original steel collars for the beau brummels of eighty years ago had rivets for collar buttons and white paint for appearance. The new "linen steel" collars will have a gleaming porcelain enamel finish so that with the flick of a sponge they will be freshened up for the evening.



By The Wrangler

Last January I git meself lined up to scribble some hot stuff for this here sheet when the boss he says the paper situachun aint good an I better look other places.

Right quick I gits lined up with the circus poster folks where I understan there aint no paper shortage — but I pops from the sauce pan inter the stew kittle and finds theres a bad shortage in circuses.

Boy wus I tickld to git a scribble from the chief sayin that while the uncertenty on paper had cost the sheet bout ten grand in advertisin for '44, the proposichun was settled and the ship was sailin along in nice shape on its owne power. Says he: Not a single contract advertiser has took to the life boats. Says me: Boss man thats fine and anyway, what's money? — I scribbles fer the luv of it — how's about a job?

Says he: if you think you can dig up some bran new ideas on 'namelin I'll giv you a few square inch's in the book and you c'n start scribblin pronto.

Jist give me the space says I and watch the ideas pour whin I gits me stool pidguns workin.

Me first idee aint xactly originle, but with a little credit to "Steel Facts" and "Wheelabrator Digest" I offers sumthin that shud make milluns for the up-an-cumin 'nameler. I presents idee number 1 for the approval of the readin publik.

A genuwine super-doooper, no wrinkel, no scratch, eve'

brite, solid steel, porcelain 'nameled collar in white or a wide variety of colors.

The erly models got by with a cheep paint job in the days when neckin wuz "courtin" and they never herd of a swing fest or a jam sesshun.

Today folks gotta hav the best, and the gent who buys a genuwine all-steel, super-doooper collar fer comfort an lastin beauty shud insist — in fact demand — the finest in everlastin finishes.

I guess maybe the patents on the erly job hav run out so wuts to hold the enterprizin 'namelers back?

Wut if folks dont wear stiff collars no more — we gotta egucate 'em that wuts good enuf fer grampa is good enuf fer us — and wuts more, that porcelain 'namel's the only finish fur the job.

STEEL COLLARS! STEEL COLLARS!

THE AMERICAN ENAMELLED STEEL COLLAR CO. are now manufacturing their superior Collars for gentlemen's wear, at present so much worn in Europe. They have all the dressy appearance of the finest linen, and to the military or naval gentlemen and travellers are indispensable. They are always starched, ironed and presentable, and are bound to stand up against all the heat and dampness that can be brought against them. Perspiration rolls harmlessly off them, and they are instantly cleaned by a slight rub with a wet cloth. Enclose \$1 and measurement of neck to Box 5173 New York Post Office, and we will send the collar in a snug package to any address desired; or send paper pattern of collar, and we will forward its counterpart.

The trade furnished with prices on application to
AMERICAN ENAMELLED STEEL COLLAR CO.,
94 Pine Street, N. Y.

From the Editor's mail . . .

letters from other countries

Robert Bryce & Co. Pty. Ltd., Melbourne Cl.

"We have received and read with interest the first issue of your new magazine *"finish."*

" . . . Please accept our thanks and we would be pleased to continue receiving *"finish"* monthly."

CHARLES ROSS, *Managing Director*

A. P. E. M. Co., North Brighton, S.6, Melbourne

"Naturally I was delighted when I received your publication *"finish."* As far as I know it is the only independent publication devoted exclusively to porcelain enamelling, and I am sure will be much appreciated by the industry.

"We appreciate very much your sending us this copy all the way to Australia, and we are looking forward to receiving your various publications from time to time.

"Meantime we are handing our copy around to friends with the reserve of course, that they must let us have it back, and I hope they do.

"Thanking you again,"

BOB SNEDDON

A. Simpson & Son Limited,
Adelaide, South Australia

"I have just been reading the copy of *"finish"* which you sent, and I must say I was astonished such a publication could be produced under present conditions. . . .

"All of the articles are of the highest standards, and if you can keep this up there is no doubt you will be doing a great service to the enamel industry. We are afraid that under present conditions, it is not likely we will be able to do much business with any of your advertisers, so if you wish, we would be quite willing to become a paying subscriber . . ."

A. M. SIMPSON, *Director*

Ferramic Industries Limited, Herts, England.

"I thank you very much for the copy of your excellent magazine *"finish,"* which, if the first issue is anything to go by, should meet with general approval. I look for-

ward to receiving it regularly and hope that it will continue for years to come.

"Enclosed please find the card, duly filled in, and I should appreciate it if you would let me have an invoice covering two years' subscriptions in order that it can be presented to the bank to obtain the dollars necessary."

C. P. STONE, *Managing Director.*

The National Electrical & Engineering Co., Ltd.,
Wellington, New Zealand

"We have received Vol. 1, No. 1 of *"finish,"* being your first issue dated January, 1944.

"We are glad of the opportunity of perusing this publication, and now wish to congratulate you on the excellence of its presentation.

"You have our best wishes for every success in the future, and we shall look forward to receiving further issues which we feel will prove of great value to us.

"This Company is vitally concerned in the porcelain enamelling industry. In more peaceful days we manufactured electric and gas ranges, refrigerator cabinets, washing machine bowls and parts, and a host of other porcelain enamelled products. Today, however, our plant and furnaces are practically

wholly engaged on war production.

"If you will address further issues of *"finish"* to the writer your publication will be circulated and read by all the key men in this organization."

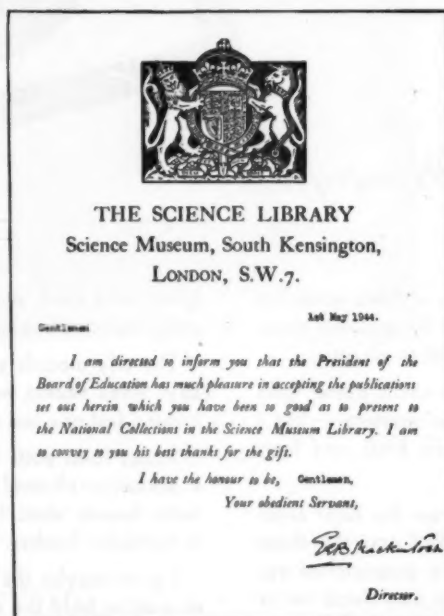
F. S. TAYLOR, *General Manager*

Ferro Enamels (Australia) Pty. Ltd.,
Sydney, Australia

"Re: Your magazine *"finish"* for 1944.

"We have read this book and were very interested in same, and would therefore like a copy for our own records."

R. M. MUELLER, *Managing Director*



The how and why of sign advertising . . . (Continued)

Part VI

you will want to consider porcelain enamel—the sign material in which the color is an integral part of the sign itself, not a surface material. The reliability of this material in holding true colors is recognized by the outdoor advertising industry. Although advances in the science of making paints and inks have made possible more accurate reproduction in printed and painted signs than ever before, nevertheless the standard adopted by the outdoor advertising industry for matching colors throughout the country has been reproduced in the only medium in which colors can be made fade-proof—porcelain enamel. In his book, *Outdoor Advertising*, Hugh E. Agnew, professor of marketing at New York University, explained how the industry standardizes colors by means of porcelain enamel as follows:

"All manufacturers of approved bulletin colors guarantee that any of the basic bulletin colors supplied by them will match the standard basic bulletin colors in accordance with their uniform identification name and number. In order to maintain a positive color control, all parties at interest are furnished with a basic color chart on which are placed vitreous enamel paddles of the twenty-six standard basic bulletin colors. These vitreous enamel color standards are non-fading, and through their use the advertising agency, the plant owner, and the manufacturer of bulletin colors are enabled to cooperate in insuring the use of the desired colors and hence faithful reproduction of copy."

The use of porcelain enamel as a non-fading standard in this industry which employs such a wide range of colors is powerful testimony to the reliability and flexibility of this material as a finish for metal signs. The sign user can have literally any combination of colors he wants; and he can be sure that the selected combination will retain its brilliance for

many years with no more maintenance than periodic cleaning.

Importance of regular illumination

Another factor affecting sign legibility is the regularity of the illumination. When one portion of a letter or pattern is brighter than another, or where a luminous background is spotty, the effect of irradiation tends to blur or obliterate detail. In other words, for maximum legibility a sign must be evenly illuminated.

The presence of distracting elements is another factor that must be considered in connection with legibility. Wherever possible, you will want to place your signs with the maximum space between them and other signs. In many cases, the limitations imposed by signs in proximity to yours can not be avoided. On open spectacular signs, some advertisers have found that they lose value from certain viewing points because other spectaculars or disturbing lights can be seen through them. In such cases, a simple and inexpensive guard blanket can be erected immediately behind the sign to block off the distracting factor.

Now let's consider the third objective of sign layout which is —

Layout that gets the sign

remembered

Fixing the identity of the advertiser's product or service in the reader's mind involves copy, placement of the sign itself, the number of signs distributed, and several other factors in addition to layout. But layout independently has much to do with the way in which a sign is recognized and remembered.

A distinctive shape, either the shape of the sign itself or a readily distinguished pattern on its face, adds substantially to both the recognition and the memory value of a sign. As has been mentioned in a previous chapter, identification signs are, in many instances, *recognized*, not read. Since most signs are rectangular or circular, Goodyear developed their

sign in a less commonly used shape—a diamond—and as a result the "memory value" of their signs is high.

Other well-known signs, distinctive because of their individual shapes, include the Cities Service clover-leaf sign, Chevrolet's well known trademark, the Shell emblem, Standard Oil of New Jersey's "Esso" in an oval, the Hood Rubber "man," R. G. Lydy's uniformed "attendant" which attracts attention to their Chicago parking lots, and the Horlick Malted Milk cutout "cow."

Many successful advertisers have discovered that signs of distinctive shape can be tied in with their radio advertising as well as printed advertising. Radio listeners are familiar with Socony-Vacuum's advice to "Stop at the sign of the flying red horse," and Gulf's "orange disc" and the "Goodyear diamond" are equally well known. These and a goodly number of other signs have visual characteristics that can be effectively described over the air.

The shape of the sign should not be overly complicated without a definite need and purpose. It may add nothing to the sign program but increased production costs. Where the outline of the emblem or other distinctive feature to be emphasized is too involved to produce in a simple, practical shape, it is wise to gain the necessary distinction through ingenuity in arranging the material within a border of standard shape.

Good examples of this treatment are the A & P food stores' circle with its distinctive style of lettering; the Hart, Schaffner and Marx rectangle with its mounted herald; the American Airlines circle with its flying eagle between the two "A's"; the Fisher Body rectangle containing the well-known coach design; and General Electric's famous circle with its script "GE" and inner swirls.

Whether distinctive shape is gained by means of the shape of the sign itself or the pattern appearing on the sign, it is one factor to consider in planning signs that are readily recognizable and remembered.

In styling a series of signs for a family of related products, or for

Over →

← from Page 47

various sizes of dealers, it is advisable to limit the number of kinds and sizes of signs. Similarity in size and shape of signs for the entire group of products adds, of course, to their recognition value.

Look to what others have done for this answer. The Buick signature in white script diagonally across a blue rectangle has practically disappeared. Yet no one considers Buick an inferior car, nor is anyone the less likely to recognize it because of the



"A distinctive shape, either the shape of the sign itself or a readily distinguished pattern on its face, adds substantially to both the recognition and the memory value of a sign."

Limiting the number of sizes permits certain economies of production. From time to time, your sign program should be checked to see whether greater simplification is possible. Goodyear has done an outstanding job of sign simplification. The Tide-water Oil Company reports substantial benefits from a standardization program, and advertisers in other fields have also found a program of simplification effective and profitable.

Should the trade-mark be a part of the sign?

Many identification signs are nothing more than trade-marks. Others incorporate the trade-mark as a part of the sign. Should a widely known trade-mark always appear on an identification sign? Oftentimes the emblem becomes out of date, and yet its user feels that to discard it might be a suicidal act. A logotype which no longer is satisfactorily legible falls in the same classification. Are such fixtures essential for identification?

emblem's discontinuance. As Carroll B. Larrabee points out in his discussion of established trade-marks in his book, *"How to Package for Profit,"* after all it is the product to which the customer develops loyalty through the years, not the package or design of the name. And when a sign can be improved by eliminating or replacing an outmoded symbol, signature, logotype or trade-mark, the advertiser has nothing to lose and probably much to gain.

Let job to be done determine shape

Too often in the past the shape a sign took was determined by the most convenient space available for the sign rather than consideration of the identification or advertising job to be done. For instance, because most gasoline dealers happen to have a place on a post which is one foot wide and six feet high, the advertiser's sign for these outlets shouldn't necessarily be vertical with the lettering running from top to bottom.

In the final analysis, the most economical sign for any type of outlet is the one seen, recognized and remembered by the most people. Therefore, to buy the most advertising for your sign dollar, take whatever steps are necessary to mount your sign where it will be seen — not the point that happens to be most convenient for your salesmen or sign crews to place a sign.

Seek simplicity

It is a good rule never to include an element in a layout that does not have a specific purpose. For instance, a border, either in color or raised on the surface of the sign, should not be included unless it is unquestionably necessary. Such a border has the literal effect of saying "Your sign stops here." If your sign is in competition with others located near it, then you want that effect and a border may be desirable. If, on the other hand, your sign is mounted on a standard and isn't close to competitive signs, you want it to appear as large as possible. This effect is created by eliminating the border and allowing the reader's eye full sweep off both ends of your sign.

Users of free standing letters, such as the Socony-Vacuum Oil Company, make use of this principle of layout. By mounting their legends on the sides of buildings and by eliminating borders on either end, they naturally lead the readers' eye from one end of their stations to the other. Instead of reading one message and stopping, his eye is naturally led to all of them. The size of the sign appears to be much larger than it actually is.

Summary of sign layout

The several factors that make for effective sign layout, as suggested in the beginning, should be left to the experienced layout artist. He will observe your preferences and employ the various techniques at his command to give you the most effective sign for your purpose. Whatever effort and talent you employ in the development of the best sign possible will pay you well.

NEXT MONTH — SELECTING MATERIALS

SEPTEMBER • 1944 finish

HOMMEL



IS YOUR ANSWER TO THESE COLOR PROBLEMS

Greater Acid and Alkali Resistance?
Large Quantities and Quick Delivery?
Workability?
Odd Color Shade to be matched?
Greater Sulphide Resistance?
Chip and Scratch Resistance?
Low Firing Range?
Even, Uniform and Brilliant Colors?
Right Price?

O. HOMMEL CO.
209 FOURTH AVE.
PITTSBURGH, PENNA.

Pacific Coast Agents
L. H. BUTCHER CO.

Send the problem to us and let
our technicians solve it.

We're sure after you test it,
that an order will follow.

World's Most Complete Ceramic Supplier

What to expect in postwar home laundry equipment *(Continued)*

men they will prove to be good business. Not all women will be able to afford to buy completely equipped laundry rooms, but the desire will be stimulated, and they will want the nearest approach to the ideal that they can get in their homes. As a result, combination selling will be easier of accomplishment.

In conclusion, let me be very serious. Our planning, as covered here, has apparently little connection with

the boys on beachheads in the Pacific or among the poppies in the hard-fought fields of Normandy. But we have not forgotten them. This is America we are planning for—America in peace. Over there the boys are fighting to come back to an America in peace. The planning we are doing now will help build the America those boys dream of—let's make it good! They will be grateful.

News from Washington . . . *(Continued)*

are shown to have an excellent "in order" record, no type falling below 97 per cent. No age figures are available for domestic water heaters.

Central heating equipment of types in general use—hot air furnace, hot water boiler and oil burner—number about 12,000,000 in a household tabulation that excluded the central heating devices of apartment houses. This equipment also is shown to be in good working order, no type fall-

ing below 95 per cent. Repairs sought this year were from 5 to 10 per cent of the total number according to type. Success in obtaining repairs varies, by type of equipment, from half to three-fourths of the demand. Oil burners, which needed the largest percentage of repairs, encountered the least difficulty getting them. No age figures are obtainable for domestic central heating equipment.

How a stove manufacturer helped raise the Normandie *(Continued)*

A complete X-ray laboratory was installed for inspection; a complete chemical lab for control; and, in addition, a sand testing laboratory.

Three stove companies have been active in this work—Marshall Stove Company, Lewisburg, Tennessee; Round Oak Company, Dowagiac, Michigan; and Renown.

Spark plug cleaner

The third project, likewise in no way comparable to our normal work, is the production of sand blast cleaner equipment for aircraft spark plugs. This unit, which is about 4 feet high x 27 inches in diameter, utilizes the same principle as the small spark plug cleaners which appeared in filling stations prior to the war. The cleaners used for aircraft plugs are of much higher capacity, resulting in faster cleaning and longer life. They must be capable of cleaning

several thousand plugs before rebuilding.

The assembly of this unit involves sheet metal body, bronze castings, a quantity of screw machine parts, steel tubing and complicated gray iron castings. An infra-red oven was installed for drying the organic coating used for finishing this equipment. This work, of course, is for the ultimate use of the Army Air Corps.

The experience of our company is probably typical of many of the appliance manufacturing organizations who entered into production of materials or products entirely foreign to their previous experience, but whose organizations willingly learned new types of work in order to expedite the delivery of needed products.

As a result of expansion of these programs, our employment is from sixty to seventy per cent higher than at its peak in peace-time, and our

sales volume from two to three times as high as prior to the war.

It's a "long haul" from building ranges to salvage equipment, magnesium castings and aircraft spark plug cleaners, but we anticipate it will be a much shorter road back to a normal peace-time production once these products are no longer necessary to the successful prosecution of the war.

New Equipment

Spot welding timer and heat control



Suitable for welding small objects of high conductivity such as aluminum or copper, a new precise welding timer with heat control for timing intervals of one-half cycle or less is announced by Westinghouse Electric and Manufacturing Company.

Precise, say the manufacturers, because the welding current is made to start at the same point on the voltage wave for every operation.

The new one-half cycle timer is furnished as a separate control for use with existing small bench welders and also in combination with a small welding transformer. Only one control tube is used, this thyratron serving the dual purpose of rectifying alternating current to charge a firing capacitor and also firing the small ignition power tube. Heat control is accomplished by a phase shift method, the adjustment dial for which is mounted on the cabinet door.

Further information on this timer, rated at 230/460 volts, 50/60 cycles, may be secured from Department 7-N-20, Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Refer to SP-18.



Three Reasons for the quality of Orefraction Zircon

The unvarying high quality of Orefraction Zircon doesn't just "happen." It is due to —

1. The best concentrate obtainable.
2. Exclusive processes and equipment to separate the pure Zircon from all other minerals and impurities.
3. The "know how" to develop such processes and design such equipment.

Orefraction Zircon has improved the enamel frits of other users. It should do the same for you.



Produced by

Orefraction, Inc.

7516 Meade Street

Pittsburgh 8, Pa.



After the deadline . . . (last minute news)

Hotpoint organizes department store sales division

Major Floyd Slasor, who served overseas in two world wars, and spent the time between in various sales executive capacities for Hotpoint and General Electric appliance divisions, has been appointed to head the newly-formed Hotpoint department store sales division, according to R. W. Turnbull, president, Edison General Electric (Hotpoint) Appliance Company, Chicago. The formation of a department store division to study and conduct Hotpoint's merchandising activities with these appliance outlets is seen as a step in recently announced plans to install "complete kitchen" displays and sales programs in large stores.

Major Slasor was recently released from the Army Air Corps after 18 months service in the South Pacific. In World War I he served an equal time in France. Following his 1919 Army discharge, he studied electrical

Chicago enamelers club 4th wartime meeting

The Chicago District Enamelers Club will hold its fourth wartime meeting on Saturday, September 23, at The Graemere Hotel, Washington Blvd. at Garfield Park, Chicago.

Luncheon is scheduled for 12:30 P.M., to be followed by an afternoon program.

Announcement has been made by W. J. Plankenhorn, Federal Electric Co., Chicago, program chairman, that one of the feature speakers will be Edward Mackasek, managing director of the Porcelain Enamel Institute, Washington, D.C. Mr. Mackasek's subject will be "Post-war Possibilities and Their Affect on Enamel Shop Operation."

While other speakers were not announced prior to press date for FINISH, a most interesting and constructive program is promised.

Officers of the Club invite all enamelers and personnel of companies operating enameling plants to attend this fall meeting.

Now that a number of enameling plants in the area are again in operation, and others are getting their plants in order, it is felt that a discussion of mutual problems will be of distinct benefit to everyone concerned.

engineering and was graduated from the University of Nebraska in 1924.

Fluorspar restrictions lifted

Industry may resume unrestricted purchase and sale of fluorspar, effective immediately, War Production Board announced. Some restrictions on fluorspar were lifted last spring. This latest action frees fluorspar for all purposes.

Approximately 250,000 tons of the crystalline mineral have been produced annually for enamel and glass manufacture, for use as a flux in the making of steel, for making hydrofluoric acid, and as a binder for vitreous abrasive wheels, WPB officials said.

A. C. S. Division meeting

The Materials and Equipment Division of the American Ceramic Society will meet at the Summit Hotel,

Over →